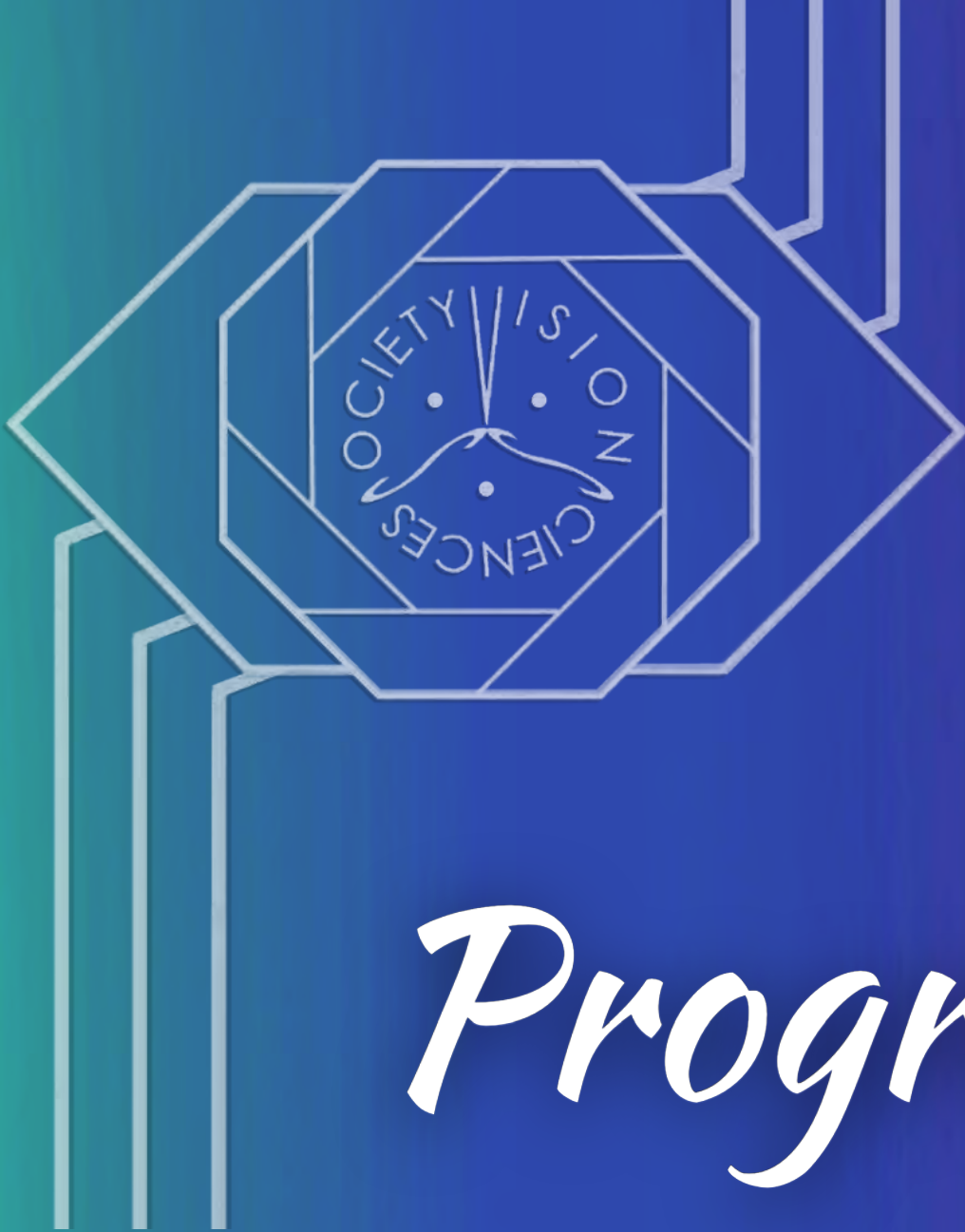




Program

23rd ANNUAL MEETING OF THE
VISION SCIENCES SOCIETY
MAY 19-24 2023, ST. PETE BEACH FL.



Welcome to VSS 2023!



We're thrilled to be back to a fully in-person meeting with attendance approaching pre-pandemic levels. Let's look at some of the highlights.

Of course, the foundation of the meeting is the scientific content. This year VSS features 215 [talk presentations](#) and 1084 [posters](#). For the first time, the Undergraduate Just-in-Time poster sessions will be in-person on Saturday and Monday so please come out to meet and support our undergraduates.

Considering the proliferation of artificial intelligence algorithms and the new challenges they present to society, this year's [Keynote Lecture](#) on Saturday is especially timely: Hany Farid will be talking about "Creating, (Mis)using, and Detecting Deep Fakes".

Bring your dancing shoes and be ready to glow on Tuesday night — [Club Vision](#) is back!

The [Awards Session](#) on Monday celebrates the accomplishments of three remarkable vision scientists and provides an opportunity for them to present their work. The 2023 Davida Teller Award will be presented to Mary A. Peterson for her pioneering research in figure-ground segmentation. The Ken Nakayama Medal will be awarded to Bill Warren in honor of his research into perception and action in real and virtual worlds. The Elsevier/VSS Young Investigator Award will go to Brian Anderson to honour his insights into the relationship between visual attention and reward.

VSS provides many training, mentorship, and career-building opportunities and aims to ensure they are beneficial to members from diverse backgrounds. The Student Postdoc Advisory Committee (SPC) is hosting an Accessibility Event on "[How to Make Accessible Scientific Presentations](#)" on Sunday. We encourage everyone to attend, especially trainees, to learn how to optimize the reach of posters and talks to all in the community.

This year the SPC and [Females of Vision et al. \(FoVea\)](#) are working together to host a two-part Career Transitions Workshop. The workshop features an [Early Career Panel](#) of researchers who have transitioned between a variety of career paths, followed by a [Round Table Discussion](#) with smaller groups. A special [Symposium on Critical Perspectives on Vision Science](#) will address how the field can overcome historic biases in domains like participant selection and development of stimuli & methods. An [Inclusivity Roundtable](#) on Saturday will provide an opportunity for people from a range of backgrounds to network. US-based researchers can learn more about American funding opportunities in the [US Funding Workshop](#) on Sunday. Trainees from all countries can also benefit from a Workshop on [Strategies for Funding Your Research Ideas Around the Globe](#) on Saturday.

Students and postdocs can sign up to participate in [Meet the Professors](#) on Monday and [Connect with Industry](#) on Tuesday. The [Undergraduate Meet-and-Greet](#) on Monday provides a friendly opportunity for undergraduate students to meet one another and discuss career options with graduate students and faculty members. The [Canadian Vision Science Social](#) on Sunday facilitates networking with colleagues north of the border. The [Visibility](#) event on Friday brings together LGBTQ+ scientists and friends. Longstanding satellites are returning – [Computational and Mathematical Models in Vision \(MODVIS\)](#), [Philosophy of Vision Workshop \(phiVis\)](#), and events hosted by [VPixx](#) and [WorldViz](#). In addition, this year's VSS includes a new [Pre-Data-Collection Poster Session](#) on Monday where researchers can discuss research projects in the planning stage. All events are open to everyone.

All registrants are encouraged to join the [Opening Night Reception](#) on Friday as well as [Demo Night](#) and the preceding beach barbeque on Monday.

In the [Public Lecture](#), Rowan Candy will discuss “Seeing Through the Eyes of a Baby” offsite at the Enoch Davis Centre.

Although we have eliminated the online component of the meeting, V-VSS, we have nevertheless preserved some of the benefits we gained from the online and hybrid meetings over the past three years. All talks will be recorded and available online, and poster presenters have the opportunity to upload their posters for current members and registrants to access. These resources are available online for all members through August 31.

VSS would not be possible without the tremendous amount of work that goes on behind the scenes by many dedicated individuals. The Society is incredibly fortunate to have the longstanding experience, initiative, creativity, professionalism, and dedication of our organizers, Meeting Perfect, particularly Shaune Wilson (President), Shawna Lampkin, Jeff Wilson, and Lily Carrick. Their hard work and proficiency lives up to the ideals conveyed by the company name. The conference also relies on the dedicated service of our Board of Directors – Geoff Boynton, Rowan Candy, Anya Hurlbert, Krystel Huxlin, Eileen Kowler, Mike Landy, Shin'ya Nishida, and Ruth Rosenholtz. As the number of events and initiatives have grown over the years, this team has dedicated untold time to optimize the meeting. In addition, past presidents Eileen Kowler and Laurie Wilcox have been invaluable sources of wise advice. VSS also benefits tremendously from the service of many volunteers, including the SPC, the DEI Advisory Committee, Awards Committees, FoVea, and abstract reviewers.

We are also grateful to the National Eye Institute for providing travel support to 75 award winners, Elsevier for their continued support of the International Travel Awards and Young Investigator Awards, and our corporate [Sponsors](#) and [Exhibitors](#) for their ongoing contributions.

Jody Culham

VSS President, 2022-23

April 2023

Schedule of Events

Thursday, May 18, 2023

9:00 am - 6:00 pm	Computational and Mathematical Models in Vision (MODVIS)	Satellite	Blue Heron
-------------------	--	-----------	------------

Friday, May 19, 2023

8:00 am - 6:00 pm	Registration Open	Registration	Grand Palm Colonnade
9:00 am - 11:30 am	What's (not) in a name: Guidelines for replicable projector-based vision experiments Organized by VPixx Technologies	Satellite	Jasmine/Palm
9:00 am - 12:00 pm	Computational and Mathematical Models in Vision (MODVIS)	Satellite	Blue Heron
11:30 am - 12:00 pm	Coffee Break	Break	Garden Courtyard
11:30 am - 2:30 pm	Lunch (on your own) cash lunch available in Courtyard	Break	Garden Courtyard
12:00 pm - 2:00 pm	Critical Perspectives On Vision Science: Towards Unbiasing Our Methods and Role in Knowledge Production	Symposium	Talk Room 1
12:00 pm - 2:00 pm	How does the brain combine generative models and direct discriminative computations for visual inference?	Symposium	Talk Room 2
2:00 pm - 2:30 pm	Coffee Break	Break	Garden Courtyard
2:30 pm - 4:30 pm	The Active Fovea	Symposium	Talk Room 1
2:30 pm - 4:30 pm	The development of categorical object representations: bridging visual neuroscience and deep learning	Symposium	Talk Room 2
4:30 pm - 5:00 pm	Coffee Break	Break	Garden Courtyard
5:00 pm - 7:00 pm	Object representations in the parietal cortex	Symposium	Talk Room 1
5:00 pm - 7:00 pm	Continuous psychophysics	Symposium	Talk Room 2
7:00 pm - 9:30 pm	Opening Night Reception	Social	Beachside Decks
8:30 pm - 9:30 pm	Visibility: A Gathering of LGBTQ+ Vision Scientists and Friends	Satellite	Garden Courtyard

Saturday, May 20, 2023

7:30 am - 6:45 pm	Registration Open	Registration	Grand Palm Colonnade
7:45 am - 8:45 am	Morning Coffee & Continental Breakfast	Break	Garden Courtyard & Pavilion
8:00 am - 5:30 pm	Exhibits Open	Exhibits	Pavilion
8:15 am - 9:45 am	Face Perception: Disorders, individual differences, and social cognition	Talk Session	Talk Room 1
8:15 am - 9:45 am	Perceptual Organization: Bistability, representation	Talk Session	Talk Room 2
8:30 am - 12:30 pm	Saturday Morning Posters Visual Search: Features, models, neural; Attention: Temporal, divided; Binocular Vision: Clinical; Plasticity and Learning: Clinical applications; Aging; Attention: Endogenous, exogenous; Spatial Vision: Perceptual properties in health and disease	Poster Session	Banyan Breezeway
8:30 am - 12:30 pm	Saturday Morning Posters Temporal Processing: Duration, timing perception; Perception & Action: Reaching, aiming, interception; Visual Memory: Long term memory; Motion: Models, neural mechanisms; Multisensory Processing: Visuo-haptic; Perception and Action: Navigation and flow in virtual environments	Poster Session	Pavilion
9:45 am - 10:30 am	Coffee Break	Break	Garden Courtyard & Pavilion
10:45 am - 12:30 pm	Materials, Objects and Perception	Talk Session	Talk Room 1
10:45 am - 12:30 pm	Eye Movements: Perception, cognition	Talk Session	Talk Room 2
12:30 pm - 2:30 pm	Lunch (on your own) cash lunch available in Courtyard	Break	Grand Palm Colonnade
12:45 pm - 2:15 pm	Virtual Reality + Eye Tracking for Research Organized by WorldViz VR	Satellite	Blue Heron
12:45 pm - 2:15 pm	Inclusivity Roundtables VSS Diversity event	Networking	Jasmine/Palm
12:45 pm - 2:15 pm	VSS Workshop for PhD Students and Postdocs Strategies for Funding your Research Ideas Around the Globe	Student	Sabal/Sawgrass
2:30 pm - 4:15 pm	Development: Infancy	Talk Session	Talk Room 1
2:30 pm - 4:15 pm	Artificial neural networks and vision	Talk Session	Talk Room 2
2:45 pm - 6:45 pm	Saturday Afternoon Posters Face Perception: Individual differences; Attention: Top-down, reward; Face Perception: Emotion; Color, Light and Materials: Cognition; Color, Light and Materials: Lightness, brightness; Undergraduate Just-In-Time 1	Poster Session	Banyan Breezeway

2:45 pm - 6:45 pm	Saturday Afternoon Posters Eye Movements: Perception, remapping; 3D: Cues and integration; Attention: Affect, threat; Spatial Vision: Crowding and eccentricity; Binocular Vision: Disparity processing; Object Recognition: Reading; Perception and Action	Poster Session	Pavilion
4:15 pm - 5:00 pm	Afternoon Coffee & Snack	Break	Garden Courtyard & Pavilion
5:15 pm - 6:45 pm	Intuitive Physics and Event Perception	Talk Session	Talk Room 1
5:15 pm - 6:45 pm	Temporal Processing	Talk Session	Talk Room 2
7:15 pm - 8:15 pm	Keynote Address given by Hany Farid Creating, (Mis)using, and Detecting Deep Fakes	Keynote	Talk Room 1-2
Sunday, May 21, 2023			
7:30 am - 6:45 pm	Registration Open	Registration	Grand Palm Colonnade
7:45 am - 8:45 am	Morning Coffee & Continental Breakfast	Break	Garden Courtyard & Pavilion
8:00 am - 5:30 pm	Exhibits Open	Exhibits	Pavilion
8:15 am - 9:45 am	Perceptual Organization: Motion, texture	Talk Session	Talk Room 1
8:15 am - 9:45 am	Multisensory Processing	Talk Session	Talk Room 2
8:30 am - 12:30 pm	Sunday Morning Posters Visual Search: Eye movements, attention, individual differences; Attention: Spatial; Attention: Objects; Face Perception: Experience, learning, and expertise; Attention: Cueing, inattention	Poster Session	Banyan Breezeway
8:30 am - 12:30 pm	Sunday Morning Posters Perceptual Decision-Making; Eye Movements: Saccades and pursuit; Object Recognition: Visual preference, features and objects; Spatial Vision: Neural mechanisms; Color, Light and Materials: Surfaces, materials, constancy; Object Recognition: Neural organization and representations	Poster Session	Pavilion
9:45 am - 10:30 am	Coffee Break	Break	Garden Courtyard & Pavilion
10:45 am - 12:30 pm	Plasticity and Learning 1	Talk Session	Talk Room 1
10:45 am - 12:30 pm	Perception and Action: Reach, grasp, walk	Talk Session	Talk Room 2
12:30 pm - 2:30 pm	Canadian Vision Science Social Sponsored by the York Centre for Vision Research and VISTA	Satellite	Sabal/Sawgrass
12:30 pm - 2:30 pm	Lunch (on your own) cash lunch available in Courtyard	Break	Garden Courtyard

1:00 pm - 2:00 pm	Accessibility event: how to make accessible scientific presentations Organized by the Student-Postdoc Advisory Committee (SPC)	Workshop	Blue Heron
1:00 pm - 2:00 pm	US Funding Workshop	Workshop	Jasmine/Palm
1:00 pm - 2:00 pm	VSS Public Lecture given by T. Rowan Candy Seeing through the eyes of a baby	Other	Offsite
2:30 pm - 4:15 pm	Object Recognition: Artificial neural networks, models	Talk Session	Talk Room 1
2:30 pm - 4:15 pm	Visual Search: Attention, memory	Talk Session	Talk Room 2
2:45 pm - 6:45 pm	Sunday Afternoon Posters Development: Neural mechanisms and eye movements; Visual Working Memory: Interference; Visual Working Memory: Attention, load and capacity; Eye Movements: Visual Impairment; Attention: Individual differences; Motion: Local, in depth; Perceptual Decision-Making: Confidence	Poster Session	Banyan Breezeway
2:45 pm - 6:45 pm	Sunday Afternoon Posters Binocular Vision: Integration and rivalry; Perception and Action: Navigation and flow; 3D: Shape; Perceptual Organization: Shape, figure/ground, occlusion; Plasticity and Learning: Statistical learning; Plasticity and Learning: Tasks, models; Face Perception: Insights from artificial neural networks	Poster Session	Pavilion
4:15 pm - 5:00 pm	Afternoon Coffee & Snack	Break	Garden Courtyard & Pavilion
5:15 pm - 7:15 pm	Attention: Mechanisms and models	Talk Session	Talk Room 1
5:15 pm - 7:15 pm	Color, Light and Materials: Cones to cognition	Talk Session	Talk Room 2
7:30 pm - 8:30 pm	Career Transitions Workshop, Part 1: Early Career Panel Organized by the VSS Student-Postdoc Advisory Committee (SPC)	Workshop	Jasmine/Palm
8:45 pm - 9:45 pm	Career Transitions Workshop, Part 2: Where do I go from here? Round table Discussion Organized by Females of Vision et al (FoVeA)	Satellite	Garden Courtyard
Monday, May 22, 2023			
7:45 am - 8:45 am	Morning Coffee & Continental Breakfast	Break	Garden Courtyard & Pavilion
7:45 am - 1:30 pm	Registration Open	Registration	Grand Palm Colonnade
8:00 am - 12:30 pm	Exhibits Open	Exhibits	Pavilion
8:15 am - 9:45 am	Spatial Vision	Talk Session	Talk Room 1
8:15 am - 9:45 am	Motion: Neural mechanisms, models, perception	Talk Session	Talk Room 2

8:30 am - 12:30 pm	Monday Morning Posters Scene Perception: Spatiotemporal factors; Attention: Features; Attention: Temporal, templates, memory; Object Recognition: Models; Image Preference, Statistics and Aesthetics; Undergraduate Just-In-Time 2	Poster Session	Banyan Breezeway
8:30 am - 12:30 pm	Monday Morning Posters Visual Working Memory: Space, features, objects; Multisensory Processing: Audio-visual, visuo-vestibular; Visual Working Memory: Neural mechanisms; Visual Working Memory: Serial dependence; Eye Movements: Individual differences, novel measurement	Poster Session	Pavilion
9:45 am - 10:30 am	Coffee Break	Break	Garden Courtyard & Pavilion
10:45 am - 12:15 pm	Development: Disorders	Talk Session	Talk Room 1
10:45 am - 12:15 pm	3D: Disparity and shape	Talk Session	Talk Room 2
12:30 pm - 2:00 pm	VSS Awards Session Davida Teller Award, Ken Nakayama medal, Young Investigator talks	Award	Talk Room 2
12:30 pm - 2:30 pm	Lunch (on your own) cash lunch available in Courtyard	Break	Garden Courtyard
2:00 pm - 4:00 pm	Pre-Data-Collection Poster Session	Satellite	Jasmine/Palm
2:30 pm - 3:30 pm	Undergrad Meet and Greet	Student	Banyan/Citrus
3:30 pm - 5:00 pm	Meet the Professors	Student	Banyan Breezeway
6:00 pm - 8:00 pm	Demo Night BBQ	Social	Beachside Decks
7:00 pm - 10:00 pm	Demo Night	Social	Talk Room 1-2
Tuesday, May 23, 2023			
7:45 am - 8:45 am	Morning Coffee & Continental Breakfast	Break	Garden Courtyard & Pavilion
7:45 am - 6:45 pm	Registration Open	Registration	Grand Palm Colonnade
8:00 am - 5:30 pm	Exhibits Open	Exhibits	Pavilion
8:15 am - 9:45 am	Plasticity and Learning 2	Talk Session	Talk Room 1
8:15 am - 9:45 am	Binocular Vision	Talk Session	Talk Room 2
8:30 am - 12:30 pm	Tuesday Morning Posters Visual Search: Scenes and other natural environments; Scene Perception: Neural mechanisms; Scene Perception: Categorization, memory, cognition; Face Perception: Models; Face Perception: Neural mechanisms; Perceptual Organization: Segmentation, grouping, similarity; Color, Light, and Materials: Neural	Poster Session	Banyan Breezeway

mechanisms, models

8:30 am - 12:30 pm	Tuesday Morning Posters Spatial Vision: Models and image statistics; Attention: Bottom-up; Visual Memory: Buildup, imagery, ensembles; Development: Perception and cognition; Motion: Higher-order; Eye Movements: Complex tasks	Poster Session	Pavilion
9:45 am - 10:30 am	Coffee Break	Break	Garden Courtyard & Pavilion
10:45 am - 12:30 pm	Visual Memory: Space, time, features, objects	Talk Session	Talk Room 1
10:45 am - 12:30 pm	Object Recognition: Categories, neural mechanisms	Talk Session	Talk Room 2
12:30 pm - 1:15 pm	VSS Business Meeting	Business	Talk Room 2
12:30 pm - 2:30 pm	Lunch (on your own) cash lunch available in Grand Palm Colonnade	Break	Grand Palm Colonnade
12:30 pm - 2:30 pm	phiVis: Philosophy of Vision Science Workshop	Satellite	Glades/Jasmine
1:15 pm - 2:30 pm	Connect with Industry	Networking	Blue Heron
2:30 pm - 4:15 pm	Eye Movements: Neural processes and models	Talk Session	Talk Room 1
2:30 pm - 4:15 pm	Scene Perception	Talk Session	Talk Room 2
2:45 pm - 6:45 pm	Tuesday Afternoon Posters Eye Movements: Scenes, VR, 3D; 3D: Spatial layout and VR/AR; Perceptual Organization: Contour integration, common fate; Plasticity and Learning: Sensorimotor; Plasticity and Learning: Cortex; Motion: Optic flow; Perception & Action: Grasping	Poster Session	Banyan Breezeway
2:45 pm - 6:45 pm	Tuesday Afternoon Posters Face Perception: Wholes, parts, configurations, and features; Face Perception: Development and disorders; Face Perception: Social cognition; Object Recognition: Neural mechanisms; Object Recognition: Categories	Poster Session	Pavilion
4:15 pm - 5:00 pm	Afternoon Coffee & Snack	Break	Garden Courtyard & Pavilion
5:15 pm - 7:15 pm	Attention: Models, individual differences, reward, capture, shifting	Talk Session	Talk Room 1
5:15 pm - 7:15 pm	Visual Working Memory	Talk Session	Talk Room 2
10:00 pm - 2:00 am	Club Vision	Social	Talk Room 1-2
Wednesday, May 24, 2023			
7:45 am - 8:45 am	Morning Coffee & Continental Breakfast	Break	Garden Courtyard & Pavilion

7:45 am - 12:45 pm	Registration Open	Registration	Grand Palm Colonnade
8:15 am - 10:00 am	Perceptual Decision-Making and Confidence	Talk Session	Talk Room 1
8:15 am - 10:00 am	Visual Search	Talk Session	Talk Room 2
8:30 am - 12:30 pm	Wednesday Morning Posters Visual Search: Attention; Visual Search: Strategies, efficiencies; Visual Memory: Capacity, encoding, retrieval; Spatial Vision: Texture; Temporal Processing: Neural mechanisms and models; Object Recognition: Features and parts	Poster Session	Banyan Breezeway
8:30 am - 12:30 pm	Wednesday Morning Posters Eye Movements: Attention, cognition, neural processes; Eye Movements: Fixation; Scene Perception: Natural image statistics; Scene Perception: Models; Scene Perception: Virtual environments; Perceptual Organization: Symmetry, preference, ensembles; Perception and Action: Perception of Human Actions and Bodies	Poster Session	Pavilion
10:00 am - 10:45 am	Coffee Break	Break	Garden Courtyard & Pavilion
10:45 am - 12:30 pm	Attention: Spatial, featural, temporal, divided	Talk Session	Talk Room 1
10:45 am - 12:30 pm	Face Perception: Neural mechanisms and models	Talk Session	Talk Room 2

2023 Board of Directors

Geoffrey Boynton (2025)

President-Elect

University of Washington

[Website](#)

T. Rowan Candy (2024)

Director

Indiana University

[Website](#)

Jody Culham (2024)

President

University of Western Ontario

[Website](#)

Anya Hurlbert (2025)

Treasurer

Newcastle University

[Website](#)

Krystel Huxlin (2026)

Director

University of Rochester

[Website](#)

Eileen Kowler (2023)

Past President

Rutgers University

[Website](#)

Michael Landy (2026)

Director

New York University

[Website](#)

Shin'ya Nishida (2025)

Director

Kyoto University

[Website](#)

Ruth Rosenholtz (2023)

Director

MIT

[Website](#)

Term ends in May of year shown.

2023 Keynote – Hany Farid



Hany Farid

Electrical Engineering & Computer Sciences and the School of Information, University of California Berkeley

Hany Farid is a Professor at the University of California, Berkeley with a joint appointment in Electrical Engineering & Computer Sciences and the School of Information. His research focuses on digital forensics, forensic science, misinformation, and human perception. Dr. Farid received his undergraduate degree in Computer Science and Applied Mathematics from the University of Rochester in 1989, a M.S. in Computer Science from SUNY Albany in 1992, and his Ph.D. in Computer Science from the University of Pennsylvania in 1997. Following a two-year post-doctoral fellowship in Brain and Cognitive Sciences at MIT, Hany Farid joined the faculty at

Dartmouth College in 1999 where he remained until 2019. Dr. Farid is the recipient of an Alfred P. Sloan Fellowship, a John Simon Guggenheim Fellowship, and is a Fellow of the National Academy of Inventors.

To learn more about Professor Hany Farid and his research, please visit his [website](#).

Creating, (Mis)using, and Detecting Deep Fakes

Saturday, May 20, 2023, 7:15 – 8:15 pm, Talk Room 1-2

Synthetic media – so-called deep fakes – have captured the imagination of some and struck fear in others. These stunningly realistic images, audio, and videos are the product of AI-powered synthesis tools. Although just the latest in a long line of techniques used to manipulate reality, deep fakes pose new opportunities and risks due to their ease of use and their democratized accessibility. I will describe how deep fakes are created, how they are being used and misused, and if and how they can be perceptually and computationally distinguished from reality.

Davida Teller Award – Mary A. Peterson

Monday, May 22, 2023, 12:30 – 2:00 pm, Talk Room 2

The Vision Sciences Society is honored to present Mary A. Peterson with the 2023 Davida Teller Award

Congratulations to Mary A. Peterson, the eleventh recipient of the Davida Teller Award. The Teller Award was created to honor the late Davida Teller's exceptional scientific achievements, commitment to equity, and strong history of mentoring. The award is given to a female vision scientist in recognition of her exceptional, significant, or lasting contributions to the field of vision science.



Mary A. Peterson

Professor of Psychology and Director of the Cognitive Science Program at the University of Arizona

Dr. Mary A. Peterson is a Professor of Psychology and Director of the Cognitive Science Program at the University of Arizona. Following a B.A. in English Literature from Marymount Manhattan College, where she graduated *summa cum laude* in 1972, Mary decided to change direction. Ultimately, she decided to study visual perception with Julian Hochberg at Columbia University (1978-1983). After starting as an Assistant Professor at SUNY Stony Brook, she moved to the University of Arizona in 1988.

Dr. Peterson is a leader in the study of perceptual organization and a pioneer in the modern study of figure-ground processing. She has employed clever behavioral experiments, neuroimaging, and patient work to demonstrate that perceptual organization is an iterative process in which past experience impacts all “stages” of perception. Although her revolutionary ideas and compelling data initially went against the grain of the then-prevailing theories of perception as a serial bottom-up process, her innovative perspective has now become the predominant way that vision scientists think about perception. Her research contributions have been widely recognized, including her election to fellow status in the American Association for the Advancement of Science (AAAS), the American Psychological Association (APA), the Association for Psychological Science (APS), the Society of Experimental Psychologists (SEP), and the International Neuropsychological Symposium (INS).

Dr. Peterson has been exemplary in her commitment to diversity, equity, and inclusion. Spurred by discussions at VSS 2015, she and a team of other women co-founded Females of Vision et al. (FoVeA) to advance the visibility, impact, and success of women in vision science, with Mary spearheading a National Sciences Foundation grant to fund travel & networking awards, mentorship events, and other initiatives. FoVeA events have become a vital part of the annual VSS meeting and have continually ensured that the mandate serves a range of marginalized groups. Mary has also been an advocate and ally to marginalized groups through service to her University, the Psychonomic Society, and Women in Cognitive Science (WiCS).

Mary has been widely recognized as a supportive and influential mentor, both to individuals and communities. In 2019, she was awarded an Excellence in Mentoring Award from the University of Arizona and the Early Career Psychologist Champion Award from the APA.

Dr. Peterson has been a member of the Board of Directors for VSS, served as Chair of the Governing Board of

the Psychonomic Society, was co-founder and President of the Configural Processing Consortium, and has been active in the Federation of Associations in Behavioral & Brain Sciences (FABBS). She received the Psychonomic Society's highest honor, the Clifford T. Morgan Distinguished Leadership Award.

Ken Nakayama Medal for Excellence in Vision Science – William H. Warren

Monday, May 22, 2023, 12:30 – 2:00 pm, Talk Room 2

The Vision Sciences Society is honored to present William H. (Bill) Warren with the 2023 Ken Nakayama Medal for Excellence in Vision Science.

The Ken Nakayama Medal is in honor of Professor Ken Nakayama's contributions to the Vision Sciences Society, as well as his innovations and excellence in the domain of vision sciences.

The winner of the Ken Nakayama Medal receives this honor for high-impact work that has made a lasting contribution in vision science in the broadest sense. The nature of this work can be fundamental, clinical or applied.



William H. (Bill) Warren

Chancellor's Professor, Brown University

Bill Warren received his B.A. in 1976 from Hampshire College concentrating in Psychology, Biology and Philosophy and a Ph.D. in 1982 from the University of Connecticut in Experimental Psychology with Robert Shaw and Michael Turvey. Following a brief post-doctoral stint at the University of Edinburgh with David Lee, he became faculty at Brown University, where he is now Chancellor's Professor in the Department of Cognitive, Linguistic and Psychological Sciences. In 1998, he founded the Virtual Environment Navigation Lab (VENLab) to study perception and action, well before the recent adoption of virtual reality techniques in research.

Bill Warren has broadened the view of vision at VSS to include many questions about how vision guides people's interactions with the real and virtual world, which is obviously what vision is really for. His work has revealed how people use vision to perceive their environment, as well as how they subsequently control their actions. The former involves demonstrating people's proficiency at judging affordances, surface layout, and self-motion. The latter involves demonstrating how adaptive behavior emerges from the dynamic interaction between an organism and its environment. Bill has examined all this in a rigorous manner for a wide variety of topics such as judging whether one can step onto or pass between surfaces, judging where one is heading on the basis of the optic flow, controlling locomotion between obstacles, towards targets, and in large crowds, and navigating over longer distances. He has collaborated with movement scientists on visual-motor coordination, with biologists on insect flight control, with computer scientists on collective crowd dynamics, and with safety researchers on emergency evacuation. He has consistently combined experimental, computational and theoretical analyses of the problems he has tackled, often exposing implicit assumptions that others are making. Finally, he used mobile virtual reality — long before it became popular and accessible — to conduct ground-breaking experiments on how walking subjects use visual information to guide naturalistic behavior in controlled settings. Building on the theoretical insights of James Gibson, he has introduced the VSS community to a new way of considering vision. His work has been instrumental in defining the field that we know as Perception and Action.

Bill is the recipient of a Fulbright Research Fellowship, Brown's Teaching Award for Excellence in the Life Sciences, and is an elected Fellow of the Society of Experimental Psychologists. He has been Professeur Invité at the University of Paris Orsay and the University of Aix-Marseille, and is currently President of the International Society for Ecological Psychology.

Elsevier/VSS Young Investigator Award – Brian A. Anderson

Monday, May 22, 2023, 12:30 – 2:00 pm, Talk Room 2

The Vision Sciences Society is honored to present Brian A. Anderson with the 2023 Elsevier/VSS Young Investigator Award.

The Elsevier/VSS Young Investigator Award, sponsored by *Vision Research*, is given to an early-career vision scientist who has made outstanding contributions to the field. The nature of this work can be fundamental, clinical, or applied. The award selection committee gives highest weight to the significance, originality and potential long-range impact of the work. The selection committee may also take into account the nominee's previous participation in VSS conferences or activities, and substantial obstacles that the nominee may have overcome in their careers. The awardee is asked to give a brief presentation of her/his work and is required to write an article to be published in *Vision Research*.



Brian A. Anderson

Associate Professor, Department of Psychological & Brain Sciences, Texas A&M University

The 2023 Elsevier/VSS Young Investigator Award goes to Professor Brian A. Anderson for his seminal contributions to understanding of visual attention and cognition. Dr. Anderson is an Associate Professor with tenure in the Department of Psychological & Brain Sciences at Texas A&M University, where he also serves as the Director of Human Imaging. After graduating summa cum laude at the University of Maine at Augusta with a degree in Social Science, Dr. Anderson obtained an M.S. in Psychology working with Charles Folk at Villanova University and then a Ph.D. in Psychological and Brain Sciences with Steven Yantis at Johns Hopkins, where he also

completed a short postdoctoral fellowship.

Dr. Anderson's research has provided fundamental insights into the mechanisms of visual attention. He pioneered a method for studying how the relationship between reward and visual stimuli in one task setting can impact the allocation of attention in other contexts. This resulted in the striking discovery that visual features previously associated with rewards continue to draw attention even when those features are neither relevant nor salient. This value-driven form of attentional capture also provides a useful model for understanding failures of value-based cognitive control, such as in addiction. Dr. Anderson's work has further examined the relationship of value-based attention to dopamine signaling and to the processing of both aversive and rewarding stimuli. Dr. Anderson has had an immense impact on the field, having published over 80 original research articles and 10 review articles, and earning recognitions from the American Psychological Association, the Association for Psychological Science, and the Psychonomic Society. He has mentored many graduate, masters and undergraduate students, postdocs, and postbacs, who themselves have first authored many papers and received many awards. Dr. Anderson's accomplishments illustrate how insights from basic vision science can impact multiple disciplines and translate to the clinic and beyond.

Value-Driven Attention and the Story Behind the Science

Less than 15 years ago, the control of attention was widely held to reflect the joint influence of two underlying mechanisms of prioritization: one goal-directed and the other stimulus-driven. Now, there is considerable consensus that a third mechanism governing the control of attentional exists that is reducible to neither goal-directed nor stimulus-driven influences, which has come to be referred to as selection history. Pivotal to this fundamental shift in thinking was the finding that an arbitrary task-irrelevant stimulus less physically salient than the target could come to involuntary capture attention as a function of its reward history. That is, reward learning could directly modify the attentional priority of an otherwise ignored stimulus. This talk will recount how that finding came to be, and how my thinking on the topic has evolved over the years.

Dr. Anderson will speak during the Awards session.

2023 Sponsors

Awards Sponsor

Elsevier/*Vision Research*

Elsevier is proud to sponsor the 2023 Young Investigator Award and the VSS 2023 Elsevier/Vision Research Travel Awards.

Elsevier is a global information analytics business that helps institutions and professionals advance healthcare, open science and improve performance for the benefit of humanity.

We help researchers make new discoveries, collaborate with their colleagues, and give them the knowledge they need to find funding.

We help governments and universities evaluate and improve their research strategies. We help doctors save lives, providing insight for physicians to find the right clinical answers, and we support nurses and other healthcare professionals throughout their careers. Our goal is to expand the boundaries of knowledge for the benefit of humanity.



National Eye Institute

The National Eye Institute (NEI) conducts and supports research, training, health information dissemination, and other programs with respect to blinding eye diseases, visual disorders, mechanisms of visual function, preservation of sight, and the special health problems of individuals who are visually impaired or blind. Vision research is supported by the NEI through research grants and training awards made to scientists at more than 250 medical centers, hospitals, universities, and other institutions across the country and around the world. The NEI also conducts laboratory and patient-oriented research at its own facilities located on the NIH campus in Bethesda, Maryland.



Level 1 Corporate Member

Apple



Gold Sponsor

VPiXX Technologies

VPiXX Technologies welcomes the vision science community to VSS 2023.

Over the past 22 years, VPiXX has become known for our innovative hardware for vision research. The PROPiXX DLP LED video projector, supporting refresh rates up to 1440Hz, has become the standard for neuroimaging,



neurophysiology, and behavioral vision research applications. The TRACKPixx3 2kHz binocular eye tracker and the DATAPixx3 I/O hub offer microsecond-precise data acquisition synchronized to stimulus presentation. Our new LabMaestro software is now making these instruments even easier to use!

Visit our booth to see demonstrations of our LabMaestro suite of psychophysics software. LabMaestro Builder is your intuitive GUI application for designing and running psychophysics experiments in your lab. LabMaestro Pack&Go is your solution for quickly running psychophysics experiments on remote subject populations.

LabMaestro Simulator emulates VPixx hardware, allowing you to develop and test experiment protocols in the absence of your physical instruments. Visit our booth to discuss your research with our Staff Scientists!

Peter April, Jean-Francois Hamelin, Sophie Kenny, and Jonathan Tong wish you well.

Silver Sponsors

Exponent

Exponent is a leading scientific and engineering consulting firm.

Our multidisciplinary organization brings together more than 90 technical disciplines to address complicated issues facing industry and government today. Among myriad other specialized services,

we provide user experience and human factors support across the entire product lifecycle informed by five decades of experience in failure analysis. We are always looking for qualified PhDs, postdocs, and early-career faculty interested in technical consulting.



SR Research Ltd

SR Research produces the EyeLink family of high-speed eye trackers and has been enabling scientists to perform cutting-edge research since the early 1990s. EyeLink systems are renowned for their outstanding technical specifications, temporal precision, and superb accuracy. The EyeLink 1000 Plus has the world's lowest spatial noise and can be used in the laboratory and in EEG/MEG/MRI environments. The EyeLink Portable Duo offers the same high levels of data quality in a small, portable package. SR Research also provides sophisticated experiment delivery and analysis software, and a truly legendary support service.



Bronze Sponsors

Brain Vision LLC

Brain Vision LLC is the leading team for EEG in Vision Science. We offer full integration of EEG with many leading eye-tracking and video systems we also provide flexible and robust solutions for both stationary and mobile EEG. All of our systems are available with a

variety of electrode types such as saline-sponge nets, active gel,

passive, and dry electrodes, which are easily expandable with bio-sensors like GSR, ECG, Respiration, and EMG.

Our team is specialized in using EEG with other modalities such as fMRI, fNIRS, MEG, TMS, and tDCS/HDtDCS.

If you want to know how EEG and Vision Science improve each other, please feel free to contact us:



Phone: +1.877.EEG 4 MRI

Email: info@brainvision.com

Cambridge Research Systems

At **Cambridge Research Systems**, our reputation is founded on values of scientific rigour and integrity. For over 30 years, our unique range of Tools for Vision Science, Functional Imaging and Clinical Research has been ubiquitous in laboratories throughout the world, and cited in thousands of papers.

We design and develop innovative new tools that enable the advancement of science by combining engineering expertise with innovation, cutting edge technology, and ongoing collaboration with our valued academic partners. Our products are market leaders, our people committed and knowledgeable. Our ambition is to continue setting standards in the vision science community, of which we are proud to be a part.

We look forward to seeing you again at VSS! Please call at our booth to see our latest products for visual stimulation, eye tracking, vision assessment, and MRI; or contact enquiries@crsltd.com.

C. Light Technologies

C. Light Technologies, is a neuro-tech and AI company whose mission is to create a scanning laser ophthalmoscope (SLO) technology and eye tracking software to objectively measure eye motion via the retina. We are on the mission to create novel technology to enhance the quality of life for people with neurodegenerative disorders via the eye-brain connection.

The Retitrack™ is an Eye Movement Monitor. It is intended for recording, viewing, measuring, and analyzing temporal characteristics of fixation and saccadic responses when viewing a visual stimulus.

NIRx Medical Technologies

NIRx Medical Technologies, LLC is a globally recognized leader in providing comprehensive solutions for functional near-infrared spectroscopy (fNIRS) research. The versatility of fNIRS has seen a significant increase in its application in vision science. The technique allows for the measurement of neural activity in the visual cortex and large-scale cortical networks and is useful in investigating the neural mechanisms underlying visual attention and perception. Additionally, fNIRS is employed in studying the effects of visual deprivation or visual training. Its non-invasive and user- and subject-friendly nature makes it an ideal tool for monitoring changes in neural activity during the development of the visual system in infants and children. Furthermore, it is increasingly used in researching changes in neural activity related to visual disorders and the changes resulting from treatment.

NIRx offers a complete range of research solutions, including a versatile multimodal hardware platform, advanced online and offline analysis software, expert technical and scientific support, and comprehensive



training programs.

We are committed to supporting fNIRS researchers through our offices in Orlando, New York and Berlin, Germany. For further details on our solutions, please do not hesitate to contact us at +49 308 1453 5990 (EU), (+1) 321-352-7570 (US/Canada), or come and visit our booth at the VSS meeting.

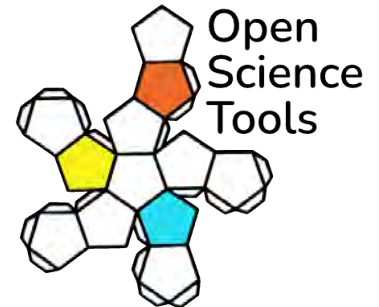
Open Science Tools

Open Science Tools created and maintains [PsychoPy](#), [PsychoJS](#) and [Pavlovía](#).

These tools are designed to make it as easy as possible to create high-precision experiments for lab-based or online studies, even running vision-science experiments and providing gamma-correction in browser-based studies. Stop by the booth to find out what's now possible – you might be surprised!

[PsychoPy](#) and [PsychoJS](#) are unusual in being open-source tools that are supported by a revenue stream, from our hosting and consultancy services, which means the tools are developed and supported by a full-time professional team. The best of both worlds!

We now also provide consultancy services, either to help generate your studies, or to provide training for your department or team. If you don't have time to write that next experiment, or to port your code over from *SomeOtherPackage*, but you do have some left over funding, then get in touch on consultancy@opensciencetools.org



Psychology Software Tools

Psychology Software Tools – Developers of E-Prime 3.0 stimulus presentation software. E-Prime 3.0 now includes E-Prime Go for remote data collection! Integrate E-Prime with eye tracking and EEG with E-Prime Extensions for Tobii Pro, EyeLink, Net Station, and Brain Products. Use Chronos for millisecond-accurate responses, sound output, and triggers to external devices. Chronos Adapters provide a simple connection to external devices, including Brain Products, ANT Neuro, BIOPAC, BioSemi, Neuroscan, MagstimEGI, NIRx, g.tec, Smart Eye and more. PST also provides solutions for fMRI research, such as Fiber Optic and Wireless Response Systems, Digital Projection System, and an MRI Simulator with head motion tracking. PST has a 35-year company history with 100,000+ users in 75 countries!



Psychonomic Society

The Psychonomic Society is a community of over 4,300 cognitive and experimental psychologists from more than 60 countries around the world. Members include some of the most distinguished researchers in the field. Many are concerned with the application of psychology to health, technology, and education. What brings us together is that we study the basic, fundamental properties of how the mind works by using behavioral techniques to better understand mental functioning.



Our most innovative research uses converging methods from behavioral measurement, neuroscience, computational modeling and other fields to achieve our research goals. Members of the Society conduct research on questions concerning memory, learning, problem solving, decision making, language, attention, and perception. We also connect with research in biology, chemistry, statistics, computer science, medicine, law, and business.

We achieve our objectives by hosting meetings around the world, publishing seven world-class, peer-reviewed journals, disseminating our research, and funding workshops and symposia.

[Visit us online](#) and [Become a Member](#).

Rogue Research Inc.

Rogue Research has been your partner in neuroscience research for over 20 years. As developers of the Brainsight® family of neuronavigation systems for non-invasive brain stimulation, we have helped make transcranial magnetic stimulation more accurate and more reproducible while keeping it simple and effective. 20 years and over 1000 laboratories later, Brainsight® continues to evolve to meet the needs in non-invasive brain stimulation.



Rogue Research has expanded beyond navigation to develop our own, next-generation, TMS device: Elevate™ TMS. Elevate™ TMS offers control over the pulse shape to ensure more reproducible excitatory or inhibitory effects on the targeted network. While Brainsight® ensures accurate targeting and Elevate™ TMS ensures reliable circuit interaction, Rogue Research is also developing a robotic positioner to ensure that the plan is accurately and efficiently carried out. The unique design ensures accuracy, repeatability and simplicity.

Rogue Research also offers our Brainsight® Vet line of neurosurgical and neuronavigation tools for animal research. Come see our navigated microsurgical robot, which is the most accurate animal stereotaxic system on the market. We also offer custom MRI compatible implants and a line of MRI coils and testing platforms.

WorldViz VR

For 20 years, **WorldViz VR** has helped over 1500 universities, businesses and government organizations to conduct [leading edge research](#) with Virtual Reality.



Over the years, WorldViz VR has developed [Vizard](#), a python-based platform that enables users to rapidly build 3D virtual reality applications that solve real world business and research challenges.

WorldViz will present SightLab VR, a fully GUI based tool that allows users to collect, review and [analyze eye tracking data](#) with support for all the major PC based VR eye tracking devices including HP Reverb Omnicept, Vive Pro Eye, Pupil Labs and Tobii VR. It will allow drag and drop adding of videos and 3D models, and many of the most used analytics methods are included into the provided templates.

Build a scene, run your experiment and review in minutes. Fully expandable and modifiable by using the GUI configurator or python code.

The WorldViz components allow integration of highly targeted [VR labs](#), and we are happy to help customers configure their own labs, tailored to their specific needs.

Zeto, Inc.

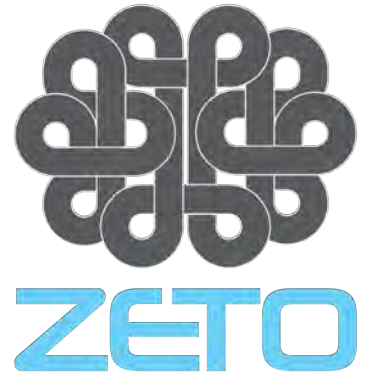
Zeto, Inc. is a privately held medical technology company located in Santa Clara, CA focused on transforming the way electroencephalography is done in clinical and research settings. Zeto's revolutionary FDA-cleared EEG platform brings the traditional EEG procedure to the 21st century by offering the WR19, a zero-prep, wireless, easy-to-wear headset with active, dry electrodes that can be positioned as per the 10-20 system.

The Zeto headset is backed by a cloud data and software platform, a real-time LSL-based API, and a TTL-based trigger device for ERP studies.

The company plans to leverage its platform technology to improve access and quality to medical EEG testing and to enable and improve adjacent biomedical research and clinical trials.

Learn more about our research platform: <https://zeto-inc.com/academic-discount/>

Contact us: research@zetoinc.com



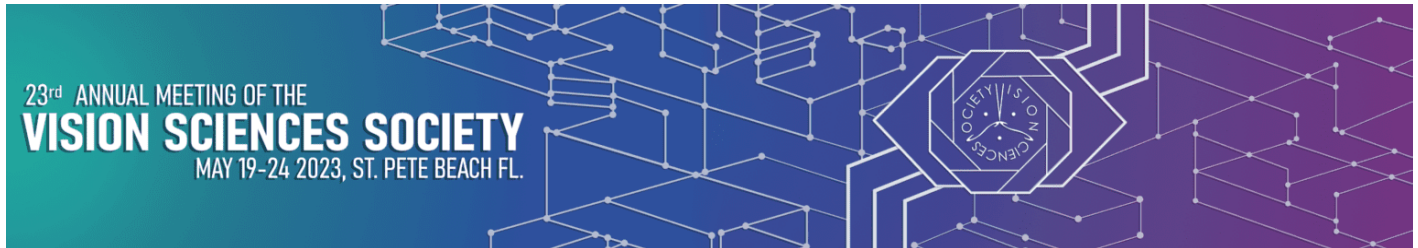
Graphics Competition Winners

Each year, VSS solicits its membership to submit creative visual images related to the field of vision science, the Society, or the VSS meeting. There are two competitions, **Website Banner Competition** and the **T-Shirt Design Competition**. Winning graphic images are featured on the program, abstracts book, signage, and t-shirts.

The Vision Sciences Society is pleased to recognize **Karissa Payne** and **Evi Hendrikx**, as the winners of the 2023 Graphics Competition.

Website Banner Competition

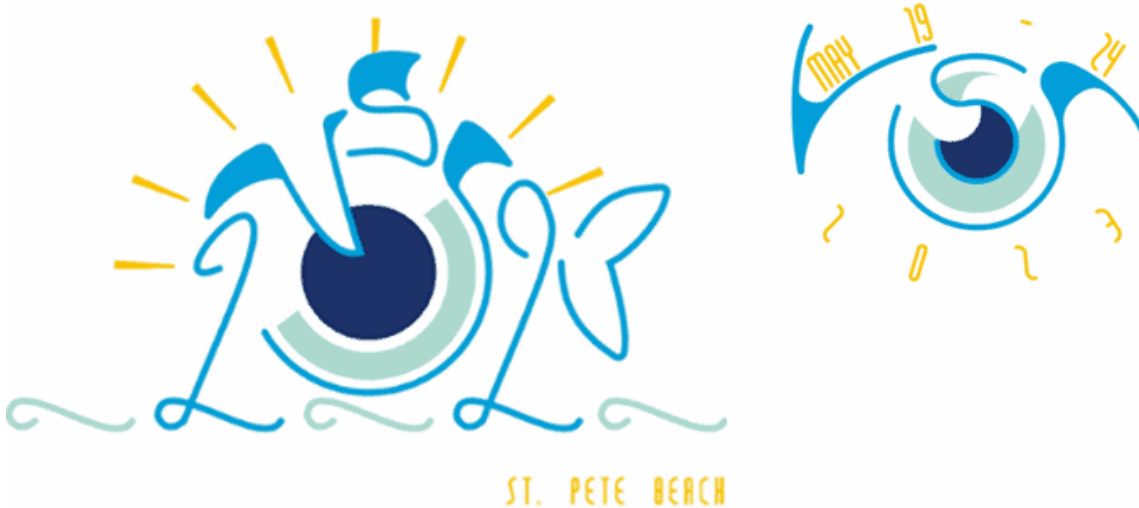
Winner: **Karissa Payne**, Kansas State University



This design takes inspiration from the technologies and statistical methods we use every day to make our science happen. The VSS logo is depicted as the pupil within an eye shape constructed with angled lines, making a camera aperture shape for the iris. The background design takes inspiration from the statistical models we create to explore connections in our data. Dots and lines indicative of parameters and weightings are remixed, creating an abstract pattern evocative of the complex nature of the elements we study.

T-Shirt Design Competition

Winner: **Evi Hendrikx**, Utrecht University



T-shirt Back and Chest Images

This year's t-shirt design uses the letters of VSS to create the contours of illustrations. The front image is an eye, to make the explicit link to the topic of the conference: vision science. The back image combines the letters of VSS with the numbers of 2023 to mimic VSS' beautiful setting, with a wink to the eye on the front. This image also playfully demonstrates the interaction between bottom-up and top-down processing in visual perception: as soon as you spot the dolphin, you will continue to see it!

2023 Annual Business Meeting

Tuesday, May 23, 2023, 12:30 – 1:00 pm, Talk Room 2

We encourage you to join the VSS Board of Directors for the Annual Business Meeting. During this meeting, the VSS leadership will provide an overview of the Society, including the outlook and priorities for next year's meeting.

The Business Meeting is an opportunity for VSS members to ask questions of the VSS Board of Directors and bring up issues of concern to the general membership.

You may send questions before the start of the Business Meeting to vss@visionsciences.org.

Inclusivity Roundtables

Saturday, May 20, 2023, 12:45 – 2:15 pm, Jasmine/Palm

The VSS conference brings together vision scientists from all over the globe with diverse life experiences, including many who have overcome or continue to face significant challenges to participating in vision science. This event will provide an opportunity to gather with those who share your background and life experiences, as well as meet and share stories with those who have followed different paths. Last year at this event we connected with Equality Florida, and discussions among event participants led to grassroots efforts, including this year's scientific symposium, "Critical Perspectives On Vision Science". Participants will have the opportunity to join in roundtable discussions. VSS wants to hear about challenges our members may have faced or may continue to face. We want to hear ideas from the membership about how VSS can better serve its diverse community, and increase the participation and improve the experiences of those from groups that have been historically underrepresented in our field.

All are invited to attend. Stop by, meet new people, and chat with a member of the board.

Refreshments and a light lunch will be available.

Accessibility event: How to make accessible scientific presentations

Sunday, May 21, 2023, 1:00 – 2:00 pm, Blue Heron

Organizers: Doug Addleman, Dartmouth College; Rebecca Hornsey, York Univesity; Takuma Morimoto, University of Giessen

Moderator: Takuma Morimoto, University of Giessen

Speakers: Jordi Asher, University of Essex (in-person); Yueh-Hsun (Walter) Wu, University of Minnesota, Twin Cities (virtual)

Conference presentations are the primary way researchers communicate their new work to other members of the scientific community. To promote effective communication between presenters and their audience, it is important to consider accessibility when preparing conference presentations. The VSS Student-Postdoc Advisory Committee is excited to announce an accessibility event that will focus on two main topics: (1) how we can enhance the accessibility of scientific presentations for individuals with visual impairments, and (2) methods for improving conference accessibility for attendees with visual impairments.

The event will start with introductory presentations from vision scientists with expertise in visual accessibility, followed by group discussions with the audience to consider actions that individual researchers can take to make presentations and conferences more accessible. The event will conclude with a general discussion where people can share their thoughts with all attendees. Our goal for this event is to expand our knowledge on accessibility and inclusivity, with a focus not only on the immediate benefits for visually impaired scientists but also on ways to enhance the accessibility of the overall VSS experience for everyone. The event is open to any VSS attendee.



Jordi M Asher

University of Essex

Jordi M Asher, is a Lecturer at the University of Essex. Her research to date has focussed on understanding the potential of plasticity in the brain and training strategies to help people recover impaired visual fields. She is currently in the process of building and testing an assistive technology for visual field loss.



Walter Wu

University of Minnesota, Twin Cities

Walter Wu, got his Ph.D. in psychology with a translational sensory science minor at the University of Minnesota. Starting in the fall, he will work at the College of Optometry at The Ohio State University as a provost's fellow. Walter is also one of the founding members of the International Network of Researchers with Vision Impairment and their Allies (INOVA). Walter's research focuses on different topics related to the impact of impaired vision on daily activities and the usage of assistive technologies in people with low vision.



Takuma Morimoto

University of Giessen

Takuma Morimoto is currently a postdoctoral fellow at University of Giessen. His research aims to understand mechanisms underpinning stable visual percepts of material properties, such as color and gloss, across vastly different lighting environments. Takuma joined the Student-Postdoc Advisory Committee to help make VSS an even more diverse and inclusive community. He is especially keen to support students and early career researchers with non-traditional pathways to

research using his experiences as a first-generation student.

Workshop for PhD Students and Postdocs

Strategies for Funding your Research Ideas Around the Globe

Saturday, May 20, 2023, 12:45 – 2:15 pm, Sabal/Sawgrass

Moderator: Krystel Huxlin, University of Rochester, USA

Panelists: Reuben Rideaux, University of Sydney; Martin Rolfs, Humboldt-Universität zu Berlin; Miriam Spering, University of British Columbia

Success in obtaining grant funding for your research ideas is a hallmark of success in academia, and increasingly, in private industry. This workshop features panelists who will provide perspectives on strategies to attain funding success. Topics will include: what constitutes a fundable research idea, opportunities and strategies for developing grantsmanship as a graduate student or postdoc – including those pertinent to diversity, how granting opportunities differ in different countries, how grants are evaluated by granting agencies, and best practices for reacting and responding to grant evaluations in a manner that ultimately leads to funding success.



Reuben Rideaux

University of Sydney

Reuben Rideaux is an ARC DECRA Fellow at the University of Sydney, and an Honorary Senior Research Fellow at the Queensland Brain Institute. Prior to this, he was a Leverhulme Early Career Fellow at the University of Cambridge and a PhD student at the Australian National University. He combines computational modelling, neuroimaging, and psychophysics to study perception and cognition. He has a particular interest in developing new methods for understanding brain function, such as bio-inspired

explainable AI, high resolution functional MR spectroscopy, and neural decoding. He leads the ECR subcommittee of the Australian Cognitive Neuroscience Society, and regularly speaks about his work to research groups, clinicians, and the media. In addition to supervision of graduate and postgraduate students, he enjoys participating in public outreach activities aimed at communicating the importance sensory and cognitive neuroscience research to the public, e.g., Cambridge BrainFest, and encouraging school students consider a career in neuroscience research, e.g., BrainBee.



Martin Rolfs

Humboldt-Universität zu Berlin

Martin Rolfs heads the Active Perception and Cognition lab at the Department of Psychology at Humboldt-Universität zu Berlin. He obtained his PhD from the University of Potsdam in 2007, for which he received the Heinz Heckhausen Award, and was a postdoc at Université Paris Descartes and a Marie Curie fellow at New York University and Aix-Marseille Université. In 2012, he established a junior research group at the Bernstein Center for Computational Neuroscience before, he was appointed Heisenberg Professor at Humboldt-Universität zu Berlin in 2018. His research is funded by the German Research foundation (DFG) and the European Research Council (ERC), and he is a core PI at Berlin's Cluster of Excellence Science of Intelligence.



Miriam Spering

University of British Columbia

Miriam Spering is Associate Professor in Ophthalmology & Visual Sciences at the University of British Columbia (UBC). She also is Director of the Graduate Program in Neuroscience and Associate Dean of Graduate and Postdoctoral Education in UBC's Faculty of Medicine. Before moving to Canada, Spering completed her undergraduate (Univ Heidelberg, Diploma in Psychology) and graduate education (Univ Giessen, PhD in Psychology) in Germany and postdoctoral training in the US (NYU, Psychology &

Neuroscience). Spering has a notable record of scientific achievements in the vision sciences, with a research focus on eye movements, perception-action interrelations, multisensory integration, and disorders of the sensorimotor system. The recipient of many awards for research and mentorship, she has broad experience in senior academic and research leadership roles, advancing graduate training, interdisciplinarity, and wellbeing, equity, diversity, and inclusivity. Spering is funded by several of the major Canadian funding agencies, and has extensive experience mentoring students to obtain their own fellowship and grant funding.



Krystel Huxlin

University of Rochester

Krystel Huxlin is the James V. Aquavella Professor of Ophthalmology and Associate Chair for Research at the University of Rochester (UR)'s Flaum Eye Institute. She also serves as the Associate Director of UR's Center for Visual Science and co-Director of its Training program. She is a member of the Neuroscience Graduate Program Executive Committee, and an Ombudsperson for graduate students and postdocs at the UR Medical Center. Huxlin earned her bachelors (1991) and doctorate (1994) degrees in

Neuroscience at the University of Sydney, Australia. She was an Australian NHMRC C.J. Martin postdoctoral fellow at UR before joining its Ophthalmology faculty (1999). Her work seeks to understand how visual functions can be restored after damage to the visual system, as well as to characterize the properties of, and mechanisms underlying different forms of vision restoration. She holds 10 patents, was the inaugural President of the Rochester SFN Chapter, is an editor at eLife and Journal of Vision, and a member of the VSS Board of Directors.

Career Transitions Workshop, Part 1: Early Career Panel

Sunday, May 21, 2023, 7:30– 8:30 pm, Jasmine/Palm

Organized by: VSS Student-Postdoc Advisory Committee (SPC)

Organizers: Claudia Damiano, KU Leuven; Stephanie Shields, The University of Texas at Austin; Maruti V Mishra, University of Richmond

Moderator: Claudia Damiano, KU Leuven

Panelists: Angelica Godinez, Humboldt Universität zu Berlin; Sabrina Hansmann-Roth, University of Iceland; Madhu Mahadevan, Magic Leap; N Apurva Ratan Murty, Massachusetts Institute of Technology; Alex White, Barnard College

Career transitions are both exciting and scary. Some of the uncertainty regarding a new role, however, can be reduced by talking to others who have made similar transitions. This year VSS-SPC and FoVea together present a two-part 'Career Transitions Workshop' on navigating these diverse pathways, with Part 1: Early Career Panel and [Part 2: Where do I go from here? Round-Table Discussion](#).

Part 1 will feature a panel discussion on early career transitions, from the undergraduate level up through securing faculty positions and jobs outside of academia. A panel of vision scientists with a variety of chosen career paths will discuss their stories, the transitions they've gone through in their careers, and how they made the key decisions that led them to their current jobs. After each panelist gives an overview of their story, audience members will be invited to participate in a question-and-answer session with the panel. The panel will include representatives from both academia and industry, so attendees will hear firsthand perspectives both on navigating academia and on transitioning between academia and industry. Especially given the recent layoffs in industry and the pandemic's lasting impact on hiring in higher education, we hope the panel will provide useful insights into current trends affecting early career researchers and ideas for how trainees can increase their chances of success in today's professional landscape.

Following this panel discussion, participants will be invited to attend [Part 2 of the Career Transitions Workshop](#), where they can take part in small group discussions and enjoy light snacks and drinks.

Note: All are welcome to attend both parts of this workshop, to only attend Part 1, or to only attend Part 2.



Angelica Godinez

Postdoctoral Researcher, Humboldt Universität zu Berlin

Angie, is a vision scientist and postdoctoral researcher working in Martin Rolfs' Active perception and Cognition lab at Humboldt-Universität zu Berlin and in the German Excellence cluster Science of Intelligence. As part of the cluster, her research is aimed at understanding visual processing for perception and action as an attempt to improve current models of perceptual processing and contribute insights to AI and robotics.

Prior to her postdoc, Angie received a BS in Psychology and MS in Human Factors and Ergonomics from San Jose State University. During this time, she worked in the Visuomotor Control Lab at NASA Ames Research Center where she conducted low-level vision research (i.e., eye-movement responses to changes in stimulus contrast and luminance) and applied research on the physiological changes due to vibration and

acceleration. For her PhD in vision science at the University of California, Berkeley, she worked with Dennis M. Levi on the impact, recovery and possible adaptations of poor binocular vision. While at Berkeley, she completed an internship at NVIDIA where she applied her knowledge of visual processing to gaze-contingent rendering in an attempt to reduce bandwidth and increase rendering speed in computer graphics.



Sabrina Hansmann-Roth

Assistant Professor, University of Iceland

Sabrina Hansmann-Roth, is an Assistant Professor at the University of Iceland and a Co-PI of the Icelandic Vision Lab. She obtained her PhD from Université Paris Descartes followed by postdoctoral positions at the University of Iceland and the University of Lille. She is interested in the mechanisms used to represent information in visual memory. For that, she investigates probabilistic representations of visual ensembles, visual priming and perceptual biases such as serial dependence. She was a former member of the VSS Student-Postdoctoral Advisory Committee and looking forward to this year's career transitions workshop, sharing her experiences and discussing with ECRs and the other panelists.



Madhu Mahadevan

Research Scientist, Magic Leap

Dr. Madhu Mahadevan is a vision research scientist at Magic Leap, Inc. She started her career as a clinical optometrist in India with a primary focus on low vision eye care and contact lens management. She then completed her PhD working with Dr. Scott Stevenson on visual attention and eye movements from the University of Houston, College of Optometry, TX. During her doctoral program, she was a research intern at Nvidia, Santa Clara, CA working on auto calibration of eye trackers in virtual reality headsets. After graduation, she joined as a user experience researcher at Human Interfaces, Austin, TX where she used product research methods to help multiple stakeholders interested in enhancing user experience across consumer and enterprise products. She is currently working at Magic Leap, Inc on their augmented reality headset where she uses applied vision concepts and optometric principles in conjunction with product research methods to evaluate design decisions and make optimal choices to help users have a comfortable viewing experience.



N Apurva Ratan Murty

Research Scientist, Massachusetts Institute of Technology

Ratan received his PhD in Neuroscience from the Center for Neuroscience, Indian Institute of Science, Bangalore. His PhD research with Prof. S.P. Arun elucidated the computational mechanisms underlying viewpoint invariant representations in the monkey inferotemporal cortex. He is currently a NIH K99/R00 Pathway to Independence fellow and Research Scientist at MIT with Profs. Nancy Kanwisher and Jim DiCarlo. In his current research, he uses methods from cognitive neuroscience, human neuroimaging, electrophysiology, and artificial intelligence, to investigate the development and cortical organization of human visual intelligence.

Alex White



Assistant Professor, Barnard College

Alex White has been studying vision since he first attended VSS as an undergraduate in 2006. He is particularly interested in visual word recognition, selective attention, eye movements, and awareness. He got his PhD working with Dr. Marisa Carrasco at NYU in 2013. After a meandering but fruitful postdoctoral journey, he started a faculty position at Barnard College in 2021. An NIH K99/R00 award facilitated that transition. For more information on his current research, see his lab [website](#). Alex also co-organizes the [Visibility](#) events at this conference.



Claudia Damiano

Postdoctoral Researcher, KU Leuven

Claudia Damiano holds a PhD from the University of Toronto (2019) and is currently a Marie Skłodowska-Curie postdoctoral fellow at the University of Leuven (KU Leuven) in Belgium, specializing in scene perception and visual aesthetics. Broadly, her research aims to understand how visual features impact aesthetic preferences and guide attention. In her current project, she explores the cognitive and emotional benefits of interacting with nature using eye-tracking and virtual reality techniques. Her work contributes to our understanding of the relationship between human perception and the appreciation of natural environments. Claudia has served as a panelist on similar early-career panels, offering advice to Master's and PhD students about transitioning to a postdoc position. As a moderator, she will ensure that the panel offers valuable insights and actionable advice to attendees.

Career Transitions Workshop, Part 2: Where do I go from here? Round Table Discussion

Sunday, May 21, 2023, 8:45 – 9:45 pm, Garden Courtyard

Sponsored by: Females of Vision et al (FoVea)

Organizers: Charisse B. Pickron, University of Minnesota & Diane Beck, University of Illinois

Career transitions are both exciting and scary. Some of the uncertainty regarding a new role, however, can be reduced by talking to others who have made similar transitions. This year VSS-SPC and FoVea together present a two-part 'Career Transitions Workshop' on navigating these diverse pathways, with [Part 1: Early Career Panel](#) and Part 2: Where do I go from here? Round-Table Discussion.



Following Part 1, Career Transition Workshop Part 2 will feature a round table discussion with small, facilitator-led groups that cover transition topics for those in early stages (e.g., students/Postdocs) through advanced career stages (e.g., associate/emeritus). We will start the event with introductions from facilitators who have experienced various career transitions including those from Part 1. Some of the transitions Part 2 will cover include: graduate student & postdoc transitions, academia to industry, academia to government/policy/non-profit, and changing institutions, with a particular interest on issues relevant to women and gender-diverse individuals. Participants will have time to choose 1 to 2 discussion groups to join throughout the workshop. Light snacks and drinks will be served during the workshop.

*It is not necessary to have attended Part 1 to attend Part 2, as both are different formats and attendees can benefit from both events depending on the level of interaction and discussion they would like to have.

FoVea is a group founded to advance the visibility, impact, and success of women in vision science (www.foveavision.org). We encourage vision scientists of all genders to participate in the workshops.

Connect With Industry

Tuesday, May 23, 2023, 1:15 – 2:30 pm, Blue Heron, Snowy Egret, and Royal Tern

To reflect the range of interests and career goals of VSS attendees, we are pleased to offer our popular 'Connect with Industry' event at VSS 2023. This is an opportunity for our members to interact with representatives of industry. Representatives from a range of organizations and industries will be present to discuss opportunities for vision scientists in their companies and to answer questions about collaborating with, and working within, their organizations. No advance sign-up is required.

Representatives from companies including [Apple](#), [Brain Vision LLC](#), [Cambridge Research Systems](#), [C. Light Technologies](#), [Exponent](#), [Magic Leap](#), [Meta](#), [NIRx Medical Technologies](#), [Open Science Tools](#), [Vivid Vision](#), [VPixx](#), and [Zeto Inc.](#) will be present to discuss opportunities for vision scientists in their companies and to answer questions about collaborating with and working within, their organizations.

Three 25-minute sessions will be scheduled (1:15– 1:40 pm, 1:40 – 2:05 pm, and 2:05 – 2:30 pm). Drop in for one, or stay for all time slots. Representatives will present an introduction to their company at the start of each session (1:15 pm, 1:40 pm, and 2:05 pm).

No sign-ups are required. Although light snacks will be served, please feel free to bring your brown bag lunch to enjoy during the event.

All VSS attendees are welcome.

Meet the Professors

Monday, May 22, 2023, 3:30 – 5:00 pm, Banyan Breezeway

Students and postdocs are invited to the 8th annual “Meet the Professors” event. This year’s event will follow a similar format to last year’s. There will be up to five, short, 15-minute meetings in small groups. Chat about science, VSS, career issues, work/life balance, or whatever comes up. Or just connect with a new VSS colleague.

Space will be limited and assigned on a first-come, first-served basis. Each student/postdoc will meet with five professors. If you would like to attend Meet the Professors, please complete this [Registration Form](#). Registration will close on April 21, 2023, or when all spaces are filled. See below for this year’s professors.

Members of the VSS Board are indicated with an asterisk* in case you have a specific interest in talking to a member of the board.

Professors and VSS Board Members

David Alais (Professor, University of Sydney, Australia) studies multisensory perception as well as bistable perception and awareness using behavioral methods.

Brian Anderson (Associate Professor, Texas A&M University) studies how the control of attention is influenced by learning, using behavioral and cognitive neuroscience methods. His academic journey began as a part-time community college student.

Ben Balas (Professor, North Dakota State University) studies visual recognition in children and adults, with an emphasis on the role of experience in shaping face and texture recognition. He uses behavioral and computational methods and also uses EEG and eye-tracking in his research.

David Brainard (Professor of Psychology, University of Pennsylvania) studies color vision, using psychophysical, physiological, and computational methods. He also has interests in physiological optics, retinal processing, and the role of melanopsin-mediated signals in visual processing.

Johannes Burge (Associate Professor of Psychology, Univ. of Pennsylvania) studies vision with natural images, focusing i) on tasks in optics, depth, motion perception, and ii) on how sensory, perceptual, and motor processing unfolds over time. He uses perceptual phenomena like illusions, and an array of tools—forced-choice and continuous psychophysics, image-computable ideal observers, and other modeling techniques—to understand how human vision works and how artificial vision systems should be designed to work. He interned at Adobe Inc. but didn’t like it much.

Marisa Carrasco (Julius Silver Professor of Psychology and Neural Science, NYU) investigates several aspects of visual perception and attention using human psychophysics, neuroimaging, neurostimulation, and computational modeling to study the relation between the psychological and neural mechanisms involved in these processes.

Monica Castelhana (Professor, Queen’s University) studies how context and real-world knowledge affects perceptual processes, memory and attention and visual search. In her research, she uses a variety of methodologies including EEG, eye movements and virtual reality to examine behavior in virtual environments.

Sang Chul Chong (Professor, Yonsei University) studies ensemble perception, visual awareness, and attention, using psychophysics and eye tracking.

Miguel Eckstein (Professor, University of California, Santa Barbara) studies attention, search, eye movements, learning, face and medical image perception using psychophysics, computational modeling, and EEG/fMRI techniques. He worked at Cedars Sinai Medical Center and NASA Ames before joining UC Santa Barbara. Messi fanatic.

James Elder (Professor and York Research Chair in Human and Computer Vision and Co-Director of the Centre for AI & Society at York University). His research seeks to improve machine vision systems through a better understanding of visual processing in biological systems. He has worked at Nortel and NEC Research and is co-founder of the AI start-up AttentiveVision.

Marc Ernst (Head of Applied Cognitive Psychology, Ulm, Germany) has a background in Physics and Cognitive Science. He worked at the Max Planck Institute for Biological Cybernetics, UC Berkeley, and at Bielefeld and Ulm University. His research interests are in multisensory perception and action (vision, touch, audition, vestibular, navigation, grasping), perceptual-motor learning, Human-Machine Interaction, and VR. Studies use both behavioral and computational modeling methods.

Debbie Giaschi (Professor, Department of Ophthalmology and Visual Sciences, University of British Columbia) studies motion perception, binocular vision and reading in children and adults using psychophysics and MRI techniques. She is particularly interested in atypical development due to amblyopia or dyslexia.

Todd Horowitz (Program Director, Basic Biobehavioral & Psychological Sciences, NCI) is a cognitive psychologist, with a B.S. from Michigan State University (1990) and a Ph.D. from the University of California, Berkeley (1995). From 1995 to 2012, he worked at Brigham and Women's Hospital and Harvard Medical School. He started as a post-doc with Jeremy Wolfe and then in 2000 was promoted to the faculty. He spent 12 years as a soft-money Principal Investigator before moving to the National Cancer Institute, where he is now a Program Director (i.e., program officer) in the Division Cancer Control and Population Sciences. He has published more than 80 peer-reviewed research papers. Currently, he is working to engage cognitive psychologists and vision scientists with problems in cancer control, such as improving medical image interpretation, studying the cognitive effects of cancer and cancer treatments, and improving the effectiveness of visual health communications.

Kendrick Kay (Assistant Professor, University of Minnesota)'s research interests lie at the intersection of visual/cognitive neuroscience, functional magnetic resonance imaging methods, and computational neuroscience. His lab combines expertise across different disciplines, including psychology, neuroscience, neuroimaging, statistics, machine learning, and software engineering.

Michael Landy* (Professor of Psychology and Neural Science, NYU) has studied a wide range of topics, including depth perception, sensory cue integration, spatial vision including texture perception, perceptual decision-making, Bayesian models of all of the above, cortical adaptation and metacognition for both perceptual and motor tasks.

Sam Ling (Associate Professor, Boston University) uses psychophysics and brain imaging techniques to investigate the neural mechanisms that support basic vision, as well as to understand how early visual processes change in response to top-down signals, such as attention, learning, arousal and memory.

Rob McPeck (Professor, SUNY College of Optometry) studies eye movements, attention, and visual search in humans and monkeys, using behavioral and neural recording techniques. He formerly worked at The Smith-Kettlewell Eye Research Institute.

Mary A. Peterson (Professor of Psychology and Director of the Cognitive Science Program, University of Arizona) uses behavioral experiments, neuroimaging, and patient work to examine the factors that influence perceptual organization, in particular, the detection of foreground objects against backgrounds. She is a proponent of women in STEM and of interdisciplinarity as exemplified by Cognitive Science.

Pawan Sinha (Professor of Brain & Cognitive Sciences, MIT) studies visual neuroscience, combining experimentation and computational modeling. He majored in computer science in India and then came to the US planning to specialize in high-performance processor design. But, due partly to his interest in visual art, he soon changed his research focus to visual neuroscience. His lab is exploring the development of visual skills in typically developing children, as well as those who have gained sight after suffering several years of congenital visual deprivation. This effort, named Project Prakash, allows the lab to simultaneously pursue the twin goals of scientific discovery as well as societal service.

Viola Störmer (Assist. Prof., Dartmouth College) studies multisensory perception, in particular how sounds affects vision, selective attention, and working memory. Her lab uses a range of techniques to investigate these topics including psychophysics, experimental psychology, and EEG.

Bill Warren (Chancellor's Professor of Cognitive Science, Brown University) uses virtual reality techniques to investigate the visual control of action, including optic flow, locomotion, collective behavior, and visual navigation. He has had an academic career and collaborated with movement scientists on visual-motor coordination, with biologists on insect flight control, with computer scientists on crowd dynamics, and with safety researchers on emergency evacuation.

Takeo Watanabe (Fred M. Seed Professor of Cognitive, Linguistic & Psychological Sciences at Brown University) takes an interdisciplinary approach to studying vision using psychophysics, fMRI, and computational neural modeling. Research areas include motion perception, interaction of motion and form, attention and perceptual learning.

Yaffa Yeshurun (Professor of Psychology at the University of Haifa) is interested in the interplay between spatial and temporal attention and various aspects of visual perception, including spatial and temporal resolution, internal noise, motion perception, perceived duration, spatial crowding and temporal crowding, relying mainly on behavioral measurements, but also pupillometry and occasionally computational modeling.

Registration

Please use our online Meet the Professors [Registration Form](#). Online registration closes on **April 21, 2023**.

Undergrad Meet & Greet

Monday, May 22, 2023, 2:30 – 3:30 pm, Banyan/Citrus

Enjoy free snacks and refreshments while you meet other undergraduates. We'll also have a few graduate student and faculty mentors who will be happy to answer any questions about the conference, career options, or scientific interests.

All are welcome!

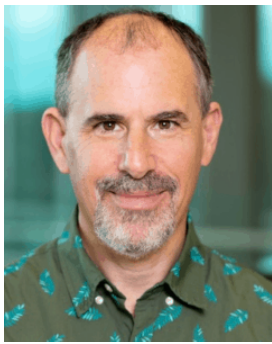
US Funding Workshop

Sunday, May 21, 2023, 1:00 – 2:00 pm, Jasmine/Palm

Moderator: Geoffrey Boynton, University of Washington

Discussants: Todd Horowitz, National Cancer Institute; Tatiana Pasternak, National Institute of Neurological Disorders and Stroke (NIH); Betty Tuller, National Science Foundation; and Cheri Wiggs, National Eye Institute (NIH)

You have a great research idea, but you need money to make it happen. You need to write a grant. This workshop will address various funding mechanisms for vision research. Our panelists will discuss their organization's interests and priorities, and give insight into the inner workings of their extramural research programs. There will be time for your questions.



Todd Horowitz

National Eye Institute (NIH)

Todd Horowitz, is a Program Director in the Behavioral Research Program's (BRP) Basic Biobehavioral and Psychological Sciences Branch (BBPSB), located in the Division of Cancer Control and Population Sciences (DCCPS) at the National Cancer Institute (NCI). Dr. Horowitz earned his doctorate in Cognitive Psychology at the University of California, Berkeley in 1995. Prior to joining NCI, he was Assistant Professor of Ophthalmology at Harvard Medical School and Associate Director of the Visual Attention Laboratory at Brigham and Women's Hospital. He has published more than

70 peer-reviewed research papers in vision science and cognitive psychology. His research interests include attention, perception, medical image interpretation, cancer-related cognitive impairments, sleep, and circadian rhythms.



Tatiana Pasternak

National Institute of Neurological Disorders and Stroke (NIH)

Tatiana Pasternak, is a Scientific Review Officer at the National Institute of Neurological Disorders and Strokes (NINDS). Since she joined NINDS in 2020, she has been focused on overseeing the review of applications submitted to the BRAIN Initiative, the funding mechanism supported by 10 NIH institutes, including the National Eye Institute. Prior to joining NINDS, she was a tenured Professor of Neuroscience at the University of Rochester with an active research program focused on cortical circuits underlying visual perception and working memory in the primate

brain. Throughout her academic career, she has participated in the NIH and NSF peer review, serving as a permanent member on several NIH study sections as well as on many other review panels. As one of the founding members of the Vision Science Society, she has served for several years on its Board of Directors and for two years as its President.



Betty Tuller

National Science Foundation

Betty Tuller, serves as a Director of the Perception, Action and Cognition Program at the National Science Foundation, where she also serves on the management team for programs in Computational Cognition, the Future of Work at the Human-Technology Frontier, the NSF AI Institutes, Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science, and Collaborative Research in Cognitive Neuroscience. Dr. Tuller earned her doctorate from the University of Connecticut in 1980, then completed post-doctoral work at Cornell University Medical

Center and NYU Medical Center. Prior to joining NSF, she was Professor of Complex Systems and Brain Sciences and Professor of Psychology at Florida Atlantic University.



Cheri Wiggs

National Eye Institute (NIH)

Cheri Wiggs, Ph.D., serves as a Program Director at the National Eye Institute (of the National Institutes of Health). She oversees extramural funding through three programs — Perception & Psychophysics, Myopia & Refractive Errors, and Low Vision & Blindness Rehabilitation. She received her PhD from Georgetown University in 1991 and came to the NIH as a researcher in the Laboratory of Brain and Cognition. She made her jump to the administrative side of science in 1998 as a Scientific Review Officer. She currently represents the NEI on several trans-NIH coordinating committees

(including BRAIN, Behavioral and Social Sciences Research, Medical Rehabilitation Research) and was appointed to the NEI Director's Audacious Goals Initiative Working Group.



Geoffrey Boynton

University of Washington

Geoffrey Boynton, is a VSS Board Member and studies visual attention, reading and prosthetic vision. After studying mathematics at U.C. San Diego and U.C. Santa Barbara, Dr. Boynton received a PhD in Psychology and Cognitive Sciences at U.C. Santa Barbara in 1994. After a decade at the Salk Institute in La Jolla, CA, he joined the faculty at the University of Washington. In 2019 led an effort to develop a research MRI facility at the new Center for Human Neuroscience in the Department of Psychology which he now directs. He also teaches courses on visual perception and statistics.

19th Annual Dinner and Demo Night

Beach BBQ: Monday, May 22, 2023, 6:00 – 8:00 pm, Beachside Sun Decks, limited seating in Banyan Breezeway

Demos: Monday, May 22, 2023, 7:00 – 10:00 pm, Talk Room 1-2

Please join us Monday evening for the 19th Annual VSS Dinner and Demo Night, a spectacular night of imaginative demos solicited from VSS members. The demos highlight the important role of visual displays in vision research and education.

Demos are free to view for all registered VSS attendees and their families and guests. The Beach BBQ is free for attendees, but **YOU MUST WEAR YOUR BADGE** to receive dinner. Guests and family members must purchase a VSS Friends and Family Pass to attend the Beach BBQ. You can register your guests at any time at the VSS Registration Desk, located in the Grand Palm Colonnade. Guest passes may also be purchased at the BBQ event, beginning at 5:45 pm.

The following demos will be presented from 7:00 to 10:00 pm, in the Island Ballroom and Jacaranda Hall:

A potpourri of motion coherence failures and anomalies

Christopher Tyler, Smith-Kettlewell Eye Research Institute

In a motion potpourri, an alternating ring demo challenges the perceptual motion coherence mechanism with alternating rings of counter-rotating motion and has an anomalous aftereffect. Transparent random-dot motion shows a contrast-increment double-bounce effect. A static triple spiral pattern generates more motion than the Kitaoka static motion demos.

An Interactive Motion Perception Tool for Kindergarteners (and Vision Scientists)

Aravind Battaje, Technische Universität Berlin, Martin Rolfs, Humboldt-Universität zu Berlin

Have you ever wondered how early visual motion perception works on a certain visual phenomena? Well, wonder no more! We present an interactive tool that lets you point your phone or laptop camera at things and immediately gain an intuition for it. Our tool extends the spatiotemporal energy model (Adelson & Bergen, 1985; Watson & Ahumada, 1985) to 3D (x-y-t) and runs real-time on most modern devices.

Augmented Reality Simulation of Bionic Vision

Justin Kasowski, UC Santa Barbara, Bionic Vision Lab

The Bionic Eye. Seemingly science fiction, this concept has become a reality with one commercially available device already having ~300-400 users, and many others in clinical development. Using a virtual reality headset, users can see VSS through a simulated bionic Eye. Presented by the UCSB Bionic Vision Lab.

Catch me if you can: the unpursuable vortex

Krischan Koerfer, University of Muenster, Tamara Watson, Western Sydney University, Markus Lappe, University of Muenster

A new class of motion stimuli that mimic non-rigid properties of water and fire. They can be perceived but cannot be pursued. Attempted pursuit lets one experience loss of spatial stability, making the presented vortex jump across each catch-up saccade.

Change blindness

Haley Frey, Michigan State University

There are few slow change blindness stimuli for use in systematic studies, so we created some. Here, we demonstrate how effective they are at inducing change blindness!

Contour Erasure and Filling-in

Yih-Shiuan Lin, University of Regensburg, Chien-Chung Chen, National Taiwan University, Mark W. Greenlee, University of Regensburg, Stuart Anstis, University of California, San Diego

Here in our demos, you will see several examples of the fascinating contour erasure effect: objects of various shapes and sizes completely disappear into the background or merge together after only a short adaptation period on their contours. We will also demonstrate the application of such effect in our contour adaptation contrast threshold paradigm.

Create interesting visual displays with OCTA

Eline Van Geert, KU Leuven

Multi-element displays differ in the number and variety of elements they contain, as well as in how these elements are organized (e.g., based on color, shape, or size, and in rows, columns, or more complex organizations). Which is your favorite? Come play with the OCTA app or Python toolbox (<https://doi.org/10.3758/s13428-022-01900-w>)!

Delayed visual feedback

Jeff Mulligan, Independent contractor

Introducing artificial delays in the visual consequences of a motor action can produce oscillatory behavior. The frequency of oscillation depends both on the externally applied delay, and internal delays (which vary with the type of stimulus). These effects will be demonstrated with a simple manual tracking task.

Flip tilt illusion — can you see these rings?

Li Zhaoping, Max Planck Institute for Biological Cybernetics

In flip tilt illusion, the orientation of an item appears perpendicular to its actual orientation in visual periphery. I will demonstrate using some images and explain how this illusion can be understood from mechanisms of the primary visual cortex (V1) and an information bottleneck from V1 to higher visual areas.

Fun with Birefringent Surfaces and Polarized Light

Andrew Piotrowski, Chloe Leroy, Howard C. Hughes (Retired), Gideon Paul Caplovitz University of Nevada Reno

What could possibly go wrong?!?

Going from vision research to art with stimupy

Lynn Schmittwilken; Joris Vincent, Computational Psychology, Technische Universität Berlin

Visual stimulus design is equally science and art. Our demo is about getting creative with visual stimuli: recreate well-established phenomena, explore parameterizations, or implement your very own stimulus. For this, you will use stimupy – a Python package built exactly for that purpose: to easily create and parameterize visual stimuli.

High Speed Gaze-Contingent Visual Search

Kurt Debono, Marcus Johnson, SR-Research

Try to find the target in a visual search array which is continuously being updated based on the location of your gaze. High speed video-based eye tracking combined with a high-speed monitor make for a compelling challenge.

Interactive virtual and real-world physics games

Giuliana Bucci-Mansilla, Jason Fischer, Garrett Goldin, Department of Psychological and Brain Sciences, Johns Hopkins University

Come play with blocks! In our interactive physics games, you'll put your prediction skills to the test by keeping a teetering tray balanced as you unload it (extra fun when you compete with a friend) and catching virtual blocks in a real-world box in a mixed reality display.

It's a colourful world ... or is it?

Katia Ripamonti, Rob Lee, Cambridge Research Systems

We perceive the world around us exquisitely colourful and deeply saturated. In a series of demonstrations based on Tyler (iPerception, 2016), Cohen et al. (PNAS, 2020) and Otten et al. (APS, 2016), we show that peripheral colour awareness may take place even in the absence of a physical correlate.

Let's test the Polarized contrast threshold

Payal Sangani, L V Prasad Eye Institute

Macular pigment can be perceived as a Haidinger's Brush, an entoptic phenomena. It just takes a minute or so to screen and differentiate normal and abnormal central vision. It also checks individual's sensitivity level of polarized contrast. It can be used as a Prognostic tool for amblyopia treatment outcome.

Magnetic Sand Illusion

Kensuke Shimojo, Harvard-Westlake school, Eiko Shimojo, Caltech, Daw-An Wu, Caltech, Shinsuke Shimojo, Caltech

Move one's hand closer and farther over a dynamic static noise display. The random dots appear as though they are attracted or repelled by the finger, depending on its movement.

McGurk 2.0 – Effects of orientation and image fidelity on the illusion

Jonathon Toft-Nielsen, Intelligent Hearing Systems / JÖRVEC Corp, Özcan Özdamar, University of Miami

The McGurk effect is a well know auditory illusion where speech sounds are mis-categorized due to conflicting visual cues from the speaker's face. It is a salient effect that is almost impossible to ignore, but what happens to the effect when the participant doesn't recognize a face as a face?

Motion Pareidolia

Nicolas Davidenko, UC Santa Cruz, Allison K. Allen, UC Santa Cruz, Nathan H. Heller, Dartmouth, Matthew T. Jacobs, Queen's University

Motion pareidolia is the perception of coherent motion in stimuli that are completely random. In this demo, you will be primed to see different motion patterns (drifting, rebounding, rotating, expanding, etc.) in randomly refreshing pixel arrays. You will also try to prime yourself, choosing what motion you want to see.

Out of your body and into a rabbit, or a crab. Virtual reality displays from a different point of view.

Anwesha Das, Daw-An Wu, Shinsuke Shimojo, Caltech

Using virtual reality goggles to see through a pair of cameras, you can find yourself seeing from an odd point of view, depending on how the cameras are placed. You might have an out-of-body experience, widen your field of view, or see more around the sides of an object.

Pictorial spacecrafts: the Ames' glass

Maarten Wijnjtes, Delft University of Technology

In his paper "The illusion of depth from single pictures", Ames describes nine ways of creating illusory depth, one of which is looking through a cylindrically curved lens. In this demo you can experience Ames' conjecture yourself but be warned, the effect tends to be idiosyncratic (i.e., does not work for everyone).

Saccade Sighting Showdown!

Peter April, Jean-Francois Hamelin, Dr. Sophie Kenny, Dr. Jonathan Tong, VPixx Technologies

The PROPixx 1440Hz projector is being used to study visual processing during saccades. This year we add a game to our demo. We present a word which is only visible during your saccades. The player with the fastest word sighting wins a drink ticket!

StroboPong

VSS Staff

Back by popular demand. Strobe lights and ping pong!

The Audiovisual Rabbit Illusion: Effects of Illusory Contours

Matilda Cederblad, California Institute of Technology, Noelle R. B. Stiles, University of Southern California, and Caltech, Shinsuke Shimojo, Caltech, Armand R. Tanguay, Jr., University of Southern California, and Caltech

The Audiovisual Rabbit Illusion shows that the presence or absence of a sound in a flash-beep-sequence can create an illusory flash or make a veridical flash invisible. This demonstration compares the original illusion with a version that incorporates illusory contours, indicating that illusory contours can be rapidly integrated with audition.

The FechDeck: a handtool for exploring psychophysics

James Ferwerda, Rochester Institute of Technology

The FechDeck is an ordinary deck of playing cards modified to support exploration of psychophysical methods. The deck allows users to conduct threshold experiments using Fechner's methods of adjustment, limits, and constant stimuli, scaling experiments using Thurstone's ranking, pair comparison, and category methods, and Stevens' method of magnitude estimation.

The UW Virtual Brain Project™: Virtual reality exploration of the visual, auditory, and touch systems

Melissa Schoenlein, Department of Psychology, Wisconsin Institute for Discovery; University of Wisconsin-Madison, Nathaniel Miller, University of Minnesota Medical School, Chris Racey, Psychology, University of Sussex, Simon Smith, Wisconsin Institute for Discovery, University of Wisconsin-Madison, Ross Treddinick, Wisconsin Institute for Discovery, University of Wisconsin-Madison, Kudirat Alimi, Wisconsin Institute for Discovery, University of Wisconsin-Madison, Chris Castro, College of Engineering, University of Wisconsin-Madison, Bas

Rokers, Department of Psychology, New York University, Abu Dhabi, Karen B. Schloss, Department of Psychology, University of Wisconsin-Madison; Wisconsin Institute for Discovery, University of Wisconsin-Madison

Explore the UW Virtual Brain Project – visual, auditory, and touch system lessons in virtual reality or on a desktop display. Each lesson provides an immersive experience of information flow from sensory input to cortical processing. Evidence suggests these experiences are fun and easy to use, which can advance neuroscience education.

The Weak conquer the Strong

Adam Reeves, Northeastern University, Quan Lei, Wichita State University

When mixed with an equal number of less salient (grey) disks, a set of salient (white) disks looks less numerous. The grey disks are unaffected by the white disks. This illusion was already published in JoV and followed up in Frontiers. We will show the original effect with new variations.

Triangles are AMAZING!!!

Tess White, Madalyn Sawatzky, Drew Asborn, Seth Freese, Gideon Caplovitz, University of Nevada, Reno

Triangles aren't usually considered in visual perception, but they have some amazing properties that make them so special! Come explore the wonderful world of triangles with us!

Vision's Chainsaw

Patrick Cavanagh, Glendon College, Stuart Anstis, UCSD

Moving frames can displace the apparent location of brief flashes presented at the moment the frame changes direction. We use this here to attempt a never before captured dismemberment of the human body. This is a live, so to speak, presentation and we invite observers to step up and be severed. Sorry, served.

Why do rigid objects look non-rigid?

Akihito Maruya, Qasim Zaidi, State University of New York, College of Optometry

Two solid rings rigidly linked at an angle and rolled together are seen as non-rigidly wobbling. Using computer graphics, we show that the perceived non-rigidity depends on speed and ring shape. Using model simulations, we show why the percepts depend on shape-based prior assumptions and properties of motion mechanisms.

Public Lecture – Rowan Candy



Rowan Candy

Professor of Optometry, Vision Science and Neuroscience, Indiana University, Bloomington, Indiana

Seeing through the eyes of a baby

Sunday, May 21, 2023, 1:00 – 2:00 pm, Enoch Davis Center located at 1111 18th Ave South, St. Petersburg, 33705



Have you wondered what a baby can see? Can they see colors? Can they see in 3D? Is their vision blurred? This talk will cover our current understanding of how vision develops during infancy and early childhood and the types of clinical conditions that young children might develop.

Rowan Candy is a clinician scientist who investigates the development of vision. She studies how infants interact with their natural visual environment, in particular asking how well they are able to focus and align their eyes with the goal of preventing common visual disorders. She studied at the University of Wales and UC Berkeley, and is currently a Professor of Optometry, Vision Science and Neuroscience at Indiana University.

About the VSS Public Lecture

The annual public lecture represents the mission and commitment of the Vision Sciences Society to promote progress in understanding vision and its relation to cognition, action and the brain. As scientists we are obliged to communicate the results of our work, not only to our professional colleagues, but also to the broader public. This lecture is part of our effort to give back to the community that supports us.

Attending the VSS Public Lecture

Admission to the Public Lecture is free. The lecture will be held on Sunday, May 21 at 1:00 pm at the at the [Enoch Davis Center](#) located at 1111 18th Ave South, St. Petersburg, 33705.

The Enoch Davis Center is a seven mile drive from the TradeWinds Island Grand Resort (see [directions](#)).

Attendee Resources

Abstract Numbering System

Each abstract is assigned a unique 4 or 5-digit number based on when and where it is being presented. Talk presentations are a 4-digit number and Poster presentations are a 5-digit number (the last two digits of a poster are the board number). See [Abstract Numbering](#).

ATM

An ATM is located in the main lobby of the hotel. A second ATM can be found in the lobby of the Breckenridge Building.

Audiovisual Equipment for Talks

LCD projectors are provided in the talk rooms for giving slide presentations. Computers are NOT provided. Presenters must bring their own laptop computers and set them up BEFORE the start of the session in which they are presenting. Please review the [Talk Presentation Instructions](#) for more information.

For speakers who cannot bring a laptop, there is a loaner Windows PC laptop available in the talk room. Please make advance arrangements with Jeff Wilson at the VSS Registration Desk.

Baggage Check

Bags can be checked with the Bell Hop in the main lobby.

Business Center

The Business Center is located in the hotel lobby. Computer terminals are available in both the Social Lounge and the Quiet Lounge. A printer is available in the VSS Social Lounge.

Business Meeting

The VSS Business Meeting is Tuesday, May 23, 12:30 – 1:00 pm in Talk Room 2. All VSS members are encouraged to attend. This is your opportunity to hear about VSS, ask questions, and give feedback.

Cashless Property

TradeWinds Island Resorts is now a cashless property with cash no longer accepted for payment throughout the properties. There are “Cash to Card” machines at both Island Grand Beach Resort and RumFish Beach Resort. These machines work as a reverse ATM (without the fees) converting cash to pre-paid debit cards that can be used anywhere. Employee partners are still able to accept cash for gratuities, but they will not be able to make change onsite.

Certificates of Attendance

Certificates of Attendance will be available in your VSS account the last day of the meeting. If you require additional assistance, visit the Registration Desk.

Code of Conduct

The Vision Sciences Society (VSS) is dedicated to the open exchange of ideas and the freedom of thought and expression. We are committed to running a successful meeting that fosters collegiality and celebrates the diversity of the Vision Sciences community. These aims and goals require an environment that recognizes the inherent worth of every person and group, that fosters dignity, understanding, and mutual respect, and that

embraces diversity. To help ensure these goals, each presenter, speaker, and attendee must adhere to the [Code of Conduct](#).

Contact Us

If you need to reach VSS meeting personnel while at the meeting, call extension 7814 from a house phone. From outside the hotel, call (727) 367-6461, extension 7814. VSS staff can also be reached by email at vss@visionsciences.org.

Cyber Lounge

The Cyber Lounge has merged with the Social Lounge this year. Computer terminals are available in both the Social Lounge and the Quiet Lounge. A printer is available in the Social Lounge.

Disclaimer

The Program Committee reserves the right to change the meeting program at any time without notice. Please note that this program was correct at the time of printing.

Drink Tickets

Each attendee will receive two “free drink” tickets which may be redeemed at the Opening Night Reception (May 19), Demo Night (May 22), or Club Vision (May 23).

Exhibits

All exhibits are located in the Pavilion. See our list of [Exhibitors](#) and the Exhibits Floor Plan (*coming soon*).

Exhibit Hours

Saturday, May 20, 8:00 am – 5:30 pm

Sunday, May 21, 8:00 am – 5:30 pm

Monday, May 22, 8:00 am – 12:30 pm

Tuesday, May 23, 8:00 am – 5:30 pm

Exhibitor Setup and Tear down

Setup: Friday, May 19, 4:00 – 7:00 pm and Saturday, May 20, 7:00 – 9:00 am

Tear down: Tuesday, May 23, 5:30 – 7:30 pm

Fitness Center

The RumFish Beach Resort fitness center is open 24/7 with a room key. The Center is available to attendees staying at either of the TradeWinds hotels. The TradeWinds Island Grand fitness center is currently closed.

Food Service/Catering

Complimentary coffee and tea, as well as a light continental breakfast is available each morning in the Garden Courtyard and the Pavilion. Coffee, tea, and refreshments will also be served each afternoon between afternoon talk sessions.

Your VSS registration includes a reception and a dinner. The Opening Night Reception is held on Friday night and the Demo Night BBQ dinner is held on Monday night. Both events take place on the beach (weather permitting). Attendees may purchase a [Friends & Family Pass](#), which will allow their guests to attend the food and social events.

Each attendee will be given two “free drink” tickets, good at the Opening Night Reception, Demo Night, and Club

Vision.

The VSS schedule provides a generous two-hour lunch period to take advantage of the beautiful surroundings and amenities of the TradeWinds Island Grand Hotel and the RumFish Beach Resort.

Note: VSS meeting attendees will receive a 10% discount on all food and beverage purchases in ALL TradeWinds Islands Resorts restaurants and bars. You must present your VSS badge to receive the discount.

The 10% discount does not apply to food or drinks at VSS events, such as the Opening Night Reception, Demo Night, or Grab and Go Lunches. Discounted pricing has already been applied to these functions.

Grab and Go Lunches

The TradeWinds will offer a selection of reasonably-priced lunch items just for VSS attendees.

Friday – Sunday, Tuesday 11:30 am – 2:30 pm, in the Garden Courtyard

Monday, 11:30 am – 2:30 pm, in the Grand Palm Colonnade

Friends & Family Pass

The [Friends & Family Pass](#) allows your family to enjoy our many fun VSS social events. For \$60.00, your travel companion can attend the Opening Night Reception, Demo Night, as well as enjoy all Coffee/Snack Breaks and the Daily Continental Breakfast! Passes are only \$60.00 for adult guests and \$20.00 for children ages 6 through 12. Children under the age of 6 are free. To purchase a Family & Friends Pass, please visit the VSS Registration Desk onsite.

Passes are required for entrance to all social events and meals, including the Friday evening Welcome Reception and Monday evening Demo Night.

Note: The Friends & Family Pass does not cover entrance to the scientific sessions. For a guest pass to a scientific session, please inquire at the VSS Registration Desk. For more information, please see Guests below.

Guests

Guests are allowed complimentary entry into one VSS session to see the poster or talk of the person they are guests of at the meeting.

Guests must register at the VSS Registration Desk upon arrival and must be accompanied by a VSS attendee.

Guests must wear their guest badge for entrance into the session they attend.

To attend social functions, including the Opening Night Reception, Demo Night BBQ, Coffee/Snack Breaks and Daily Continental Breakfast, attendees' guests will need to purchase a [Friends & Family Pass](#), available at the VSS Registration Desk.

Health Protocols

We strongly encourage attendees to ensure their COVID-19 vaccinations are up to date prior to the meeting.

Attendees are strongly encouraged to wear masks indoors. Masks will be available at the VSS Registration Desk.

See [Health and Safety Protocols](#).

Internet Access

VSS provides free wireless internet access in the meeting areas, guest rooms, and VSS lounges. In the VSS meeting space, connect to **twgroup**; password is **group5500**. In the hotel common areas and sleeping rooms connect to **TW**; password is **guest5500**.

If you did not bring your own computer, a limited number of laptop computers with free internet access are available for your use in both the Quiet and Social Lounges.

Lost and Found

The Lost and found is located at the VSS Registration Desk in the Grand Palm Colonnade.

Lounges

VSS offers two lounge areas exclusively for meeting attendees:

Quiet Lounge

The VSS Quiet Lounge is designed especially for attendees who need a quiet place to read, work, silently meditate, or relax. There are two laptops available. The Quiet Lounge is located in the Glades room in Jacaranda Hall.

Quiet Lounge Hours:

Friday – Sunday, 7:30 am – 9:30 pm

Monday, 7:30 am – 12:30 pm

Tuesday, 7:30 am – 9:30 pm

Wednesday, 7:30 am – 12:30 pm

Social Lounge

The VSS Social Lounge features comfortable seating for relaxing and visiting with colleagues. There are two laptops and a printer available, as well as phone charging stations. The Social Lounge is located in the Banyan/Citrus room in Jacaranda Hall.

Social Lounge Hours:

Friday – Sunday, 7:30 am – 9:30 pm

Monday, 7:30 am – 12:30 pm

Tuesday, 7:30 am – 9:30 pm

Wednesday, 7:30 am – 12:30 pm

Message Center

Messages for registrants can be left and retrieved at the VSS Registration Desk. A bulletin board will be available in the Grand Palm Colonnade for announcements and job postings.

Networking Events

Visibility: A Gathering of LGBTQ+ Vision Scientists and Friends

Friday, 8:30 – 9:30 pm

Garden Courtyard

Inclusivity Roundtables

Saturday, 12:45 – 2:15 pm

Jasmine/Palm

Undergraduate Meet and Greet

Monday, 2:30 – 3:30 pm

Pirate Island

Meet the Professors

Monday, 3:30- 5:00 pm

Banyan Breezeway

Connect with Industry

Tuesday, 1:00 – 2:30 pm

Blue Heron

Moderators

Please arrive at the meeting room 30 minutes prior to the start of your session to allow time for setup and to check in with your speakers. See [Moderator Instructions](#).

Parking

Complimentary self-parking is available to all meeting attendees. Access is through the Island Grand guard gate. Valet parking is available at the TradeWinds Grand Island Resort lobby for an additional fee.

Phone Charging Station

Phone charging stations will be located at the VSS Registration Desk and in the VSS Social Lounge.

Photographing/Videotaping Presentations

Unless otherwise noted, photographing and videotaping posters and talks is permitted at VSS. Presenters who do NOT wish to be photographed or videotaped should indicate this by displaying our “[No videos and photos](#)” image on their poster or the title slide at the beginning of their talk. The image can be downloaded from the VSS website or you can pick up a printed version at the Registration Desk.

Poster Sessions

All poster sessions are held in Banyan Breezeway and the Pavilion. The last three digits of your poster number indicate the number of your poster board. See [Abstract Numbering](#).

Posters should be put up at the beginning of a session and taken down at the end. Authors of even numbered posters are expected to be present at their posters during the entire “Even Authors Present” time, and authors of odd numbered posters are expected to be present at their posters during the entire “Odd Authors Present” time. Authors may be present during the entire session, if desired. Abstracts not presented at the meeting during the designated author present time will not be published in the *Journal of Vision*. See [Poster Presentation Instructions](#).

Please be courteous and take down your poster promptly at the end of the session so that the board is empty when the next presenter arrives to put up their poster.

Push pins are available for your use and are located in the Banyan Breezeway and Pavilion.

Printing

Need your poster printed? The local [UPS](#) store offers a variety of services.

Quiet Lounge

See [Lounges](#).

Registration

The Registration Desk is located in the Grand Palm Colonnade. The Registration Desk is open during the

following times:

Friday, May 19, 8:00 am – 6:00 pm

Saturday, May 20, 7:30 am – 6:45 pm

Sunday, May 21, 7:30 am – 6:45 pm

Monday, May 22, 7:45 am – 1:30 pm

Tuesday, May 23, 7:45 am – 6:45 pm

Wednesday, May 24, 7:45 am – 12:45 pm

Shipping

To ship your poster or other items home from the meeting, ask for the Concierge at the front desk of the TradeWinds Island Grand.

Social Lounge

See [Lounges](#).

Spa Services

The BodyWorks Spa is located at RumFish Beach Resort inside the Loggerhead Building. The Spa is open Daily from 9:00 am – 5:00 pm. For appointments call 727.363.2348 or extension 6019 from your room. Appointments must be made 24 hours in advance.

Speakers

Please arrive at the meeting room 30 minutes prior to the start of your session to allow time for setup and to check your presentation. Please see [Talk Presentation Instructions](#).

Student Events

Workshop for PhD Students and Postdocs: Strategies for Funding your Research Ideas Around the Globe

Saturday, 12:45 – 2:15 pm

Sabal/Sawgrass

Career Transitions Workshop, Part 1: Early Career Panel

Sunday, 7:30 – 8:30 pm

Jasmine/Palm

Career Transitions Workshop, Part 2: Where do I go from here? Round Table Discussion

Sunday, 8:45 – 9:45 pm

Garden Courtyard

Undergraduate Meet and Greet

Monday, 2:30- 3:30 pm

Pirate Island

Meet the Professors

Monday, 3:30- 5:00 pm

Banyan Breezeway

Code of Conduct

The Vision Sciences Society (VSS) is dedicated to the open exchange of ideas and the freedom of thought and expression. We are committed to running a successful meeting that fosters collegiality and celebrates the diversity of the Vision Sciences community. These aims and goals require an environment that recognizes the inherent worth of every person and group, that fosters dignity, understanding, and mutual respect, and that embraces diversity.

To help ensure these goals, each presenter, speaker, and attendee must adhere to the following code of conduct. The expected behavior extends to all sessions, activities, events, and informal gatherings during the conference and to any other activities, in-person or virtual, sponsored or managed by VSS.

Participants who do not comply may be barred from attending the remainder of the VSS conference or barred from participating in other VSS activities or meetings, in-person or virtual. The home institution or employer may be informed of allegations against or violations by their faculty members, trainees, employees, or affiliates.

General Behavior

Participants are expected to respect one another and behave in a civil fashion. Members should respect common sense rules for public behavior, personal interaction, common courtesy, and respect for all meeting participants.

Anti-Discrimination

VSS prohibits discrimination at its meeting against individuals on the basis of factors such as race, color, sex, sexual orientation, gender identity or expression, age, marital status, religion, national origin, ancestry, socio-economic status, physical appearance, or different abilities.

Anti-Harassment

To promote an environment that recognizes the inherent worth of every person and group, VSS is dedicated to providing its members and meeting attendees a harassment-free experience. Harassment is unwelcome or hostile behavior, including speech that intimidates or interferes with a person's participation or opportunity for participation in a conference, event, or program.

Harassment in any form, including but not limited to, harassment based on national origin, race, religion, sex, gender, or any other status protected by laws in which the conference or program is being held, will not be tolerated. Harassment includes the use of abusive or degrading language or gestures, intimidation, stalking, harassing photography or recording, inappropriate physical contact, and unwelcome sexual attention.

Other Unacceptable Behavior

- Publicly sharing screen shots, photographs, video, or audio recording of oral or poster presentations, slides, or question periods without the consent of presenters and/or contributors.
- Making VSS events and resources available to others outside one's immediate laboratory when membership or registration is required for access. When participating in events, in-person or virtual, attendees must use their own name and not attempt to misrepresent themselves in any way.
- Gaining unauthorized access or making malicious changes to the conference website, conference hosting tools, or any related systems.
- Collecting data without ensuring protocols are in accordance with governing ethical and legal standards.

- Fabrication or misrepresentation of data presented at the conference.
- Inappropriate use of nudity, sexual images, or images that would be reasonably found offensive by the membership.
- Real or implied threat of professional or financial damage or harm.

Violations of code of conduct can be reported to any of the members of the [VSS Board of Directors](#) or to [Shauney Wilson](#), the VSS Executive Director and Event Director. Any reports will be handled in the strictest confidence.

Policies have been adapted from other sources including SIGGRAPH and Association for Psychological Sciences.

Canadian Vision Science Social

Sunday, May 21, 2023, 12:30 – 2:30 pm, Sabal/Sawgrass

Organizers: Caitlin Mullin, Vision: Science to Applications (VISTA) York University; Doug Crawford, Vision: Science to Applications (VISTA) York University

Speaker: Doug Crawford, Vision: Science to Applications (VISTA) York University

This social event is open to any VSS member who is, knows, or would like to meet a Canadian Vision Scientist! Join us for casual discussions with students and faculty from several Canadian Institutes or to just satisfy your curiosity as to why we in the North are so polite and good natured, Eh? We particularly encourage trainees and scientists who would like to learn about the various opportunities available through York's Vision: Science to Applications (VISTA) program. So grab your toques and your double-double and come connect with your favourite Canucks. This event will feature free food and refreshments, with a complimentary beverage for the first 100 attendees. This event is sponsored by the York Centre for Vision Research and VISTA, which is funded in part by the Canada First Research Excellence Fund (CFREF).



Opening Night Reception

Friday, May 19, 2023, 7:00 pm – 9:30 pm, Beachside Decks

Save Friday evening for the spectacular VSS Opening Night Reception! The reception will take place on the beach and beachside sundecks from 7:00 – 9:30 pm.

Don't forget your drink tickets, which can be found in the back of your badge. Your drink tickets are also good at Demo Night and Club Vision. Friends and family may accompany you with the purchase of a [Friends and Family Pass](#). See the Registration Desk to purchase passes.

Prepare to sink your toes into the sand and enjoy this fantastic event! Please remember to wear your badge.

Computational and Mathematical Models in Vision (MODVIS)

Thursday, May 18, 2023, 9:00 am – 6:00 pm, Blue Heron

Friday, May 19, 2023, 9:00 am – 12:00 pm, Blue Heron

Organizers: Marianne Maertens, Technische Universität Berlin; Jeff Mulligan, Freelance Vision Scientist; Zygmunt Pizlo, UC Irvine; Anne B. Sereno, Purdue University; Qasim Zaidi, SUNY College of Optometry

Contributed scientific talks, with coffee service and morning snacks. More information about the workshop, including how to register, can be found at the workshop website <https://www.purdue.edu/conferences/events/modvis/>.

phiVis: Philosophy of Vision Science Workshop

Tuesday, May 23, 2023, 12:30 – 2:30 pm, Jasmine/Palm

Organizers: Chaz Firestone, Department of Psychological and Brain Sciences, Johns Hopkins University; Kevin Lande, Department of Philosophy & Centre for Vision Research, York University; Jorge Morales, Departments of Psychology and Philosophy, Northeastern University

Speakers: Wayne Wu (Carnegie Mellon), with comments from Ruth Rosenholtz (MIT); Madeleine Ransom (University of British Columbia), with comments from Isabel Gauthier (Vanderbilt); Jake Quilty-Dunn (Washington University-St. Louis), with comments from Yaoda Xu (Yale)

The past decade has seen a resurgence in conversation between vision science and philosophy of perception on questions of fundamental interest to both fields, such as: What do we see? What is seeing for? What is seeing? The phiVis workshop is a forum for continuing and expanding this interdisciplinary conversation. Short talks by philosophers of perception that engage with the latest research in vision science will be followed by discussion with a slate of vision scientists.



Conversations between philosophers of vision and vision scientists have enriched research programs in both fields. On the one hand, the latest generation of philosophers of vision are deeply immersed in the scientific literatures on natural scene statistics, visual short-term memory, ensemble perception, contour integration, amodal completion, visual salience, multi-sensory integration, visual adaptation, and much else. On the other hand, vision scientists have found a great deal of value in responding to and thinking together with philosophers about the mechanisms and effects of perceptual constancies, attentional selection, object perception, and perceptual uncertainty, to name just a handful of topics. These conversations are not only intrinsically interesting for everyone involved, they have been fruitful sources of research and collaboration. However, opportunities for dialogue are all too rare, often occurring only through chance interactions or one-off workshops. The phiVis satellite is meant to be a platform to extend these discussions.

For more information, visit: <https://www.phivis.org/>

Pre-Data-Collection Poster Session

Monday, May 22, 2023, 2:00 – 4:00 pm, Jasmine/Palm

Organizers: Sabrina Hansmann-Roth, University of Iceland; Bjoern Joerges, York University; William Ngiam, University of Chicago; Janna Wennberg, University of California

It is customary for conference posters to contain at least preliminary results. However, feedback and suggestions with regards to the experimental design – a major benefit of poster sessions – would be most helpful **before** data collection has started. In hopes of achieving this, we will be hosting a **pre-data collection poster session**.

Receiving feedback at this early stage promotes rigorous and impactful science – researchers can identify confounds, hidden assumptions, or other concerns that would likely be raised by reviewers. This cuts down research waste as suggested changes can be implemented before resources are committed. Researchers may even learn of similar studies and potential issues, helpful resources, or opportunities for collaborations between labs. This mirrors Registered Reports, an Open Science initiative, where peer review of a pre-registration occurs before data is collected.

Interested VSS attendees will be asked to sign up by indicating their research topic and a short (250 word) description of their research idea and preliminary design. Registration for this event will be **just-in-time** (deadline: **May 1**). Those selected will be asked to prepare a conference poster which focuses on the theoretical background of the study and their proposed study methods. There will be a maximum of 40 posters, and spots will be granted on a first come, first serve basis.

We are aware that, under an adversarial, competitive view of academia, this event may place presenters in a vulnerable position – participation publicizes research ideas without allowing them to formally lay claim through a publication. We encourage poster viewers to be mindful, using this event to establish collaboration with presenters and improve science. We will be creating an Open Science Framework Meetings page if presenters wish to upload their pre-data posters, providing a verification and timestamp of their research proposals. However, ultimately if you are worried about getting scooped, presenting your idea at this event might not be the right decision for you.

If you want to present a poster on your proposed research design, you can **submit your abstract using this [Google Form](#)**. If you merely want to browse and comment on the posters, no registration is necessary.

Update May 2nd: Submissions are still open, but please send us a note (bjoerges@yorku.ca) to make sure that we process your submission promptly.

What's (not) in a name: Guidelines for replicable projector-based vision experiments

Friday, May 19, 2023, 9:00 – 11:30 am, Jasmine/Palm

Organizer: Dr. Sophie Kenny, Staff Scientist at VPixx Technologies

While most vision researchers use flat-panel displays for their experiments, many also use projection systems due to their extensive range of potential applications. Projectors can be a practical solution for environments sensitive to magnetic fields (fMRI, MEG, OPM), produce a wide range of image sizes, and can often implement otherwise impossible research protocols.

The flip side of this flexibility is that few projector installations are alike, and this variability has consequences. Choices of model, manufacturer, imaging technology, projection screens, and even the equipment and observer's relative positions can influence the final appearance of stimuli or introduce artifacts. However, published papers rarely include the information that the reader or editor requires to judge whether artifacts are likely to be present and whether they might be significant enough to influence the interpretation of results.

In this educational session, we will present various research applications of projector displays and outline the consequences different choices may have on spatial uniformity, image content, brightness and contrast, stereo crosstalk, and more. Throughout the presentation, we will share guidelines to help researchers navigate the process of installing a new projector-based psychophysics laboratory, characterize current setups, and compare data collected across research laboratories and environments.

To help us plan this event, please send an email to signal your interest to scientist@vpixx.com

VPixx is a privately held company serving the vision research community by developing innovative hardware and software tools for vision scientists (<http://www.vpixx.com>). For more general educational content, visit the VPixx Online Classroom and Library (VOCAL): www.vpixx.com/vocal



Visibility: A Gathering of LGBTQ+ Vision Scientists and Friends

Friday, May 19, 2023, 8:30 – 9:30 pm, Garden Courtyard

Organizers: Michael Grubb, Trinity College; Alex White, Barnard College

LGBTQ students are disproportionately likely to drop out of science early. Potential causes include the lack of visible role models and the absence of a strong community. This social event is one small step towards filling that gap and will bring awareness to continuing challenges for queer scientists.



Please join us towards the end of the opening night reception, in the Garden Court (located between the Jacaranda building and the Grand Palm Colonnade).

All are welcome. Snacks, drinks, and camaraderie will be provided.



Virtual Reality + Eye Tracking for Research

Saturday, May 20, 2023, 12:45 – 2:15 pm, Blue Heron

Organizers: Sado Rabaudi, Product Manager, Solutions Architect, WorldViz; Dan Tinkham, Head Of Sales, Americas, WorldViz

WorldViz VR will give an educational seminar and hands-on demonstration of the latest virtual reality and mixed reality consumer devices with built in eye tracking and will explain how this equipment can be used in a research context. This presentation will include a high level overview of virtual reality and mixed reality key concepts as well as explanations for how to create custom immersive experiments using the latest software, including a demonstration of the SightLab VR Pro drag-and-drop VR + eye tracking toolkit. WorldViz VR will also provide examples of notable publications and successful use cases for virtual reality + eye tracking research across various academic disciplines. Participants will walk away with a better understanding of currently available immersive technology and how they can use it in their own research – they may be surprised how easy it is.



Symposia

Critical Perspectives On Vision Science: Towards Unbiasing Our Methods and Role in Knowledge Production

Organizers: Eline Kupers¹, Kathryn Graves², Kimele Persaud³; ¹Stanford University, ²Yale University, ³Rutgers University

How does the brain combine generative models and direct discriminative computations for visual inference?

Organizers: Benjamin Peters¹, Nikolaus Kriegeskorte¹; ¹Columbia University

The Active Fovea

Organizers: Martina Poletti¹, Martin Rolfs², Jude Mitchell¹; ¹University of Rochester, ²Humboldt-Universität

The development of categorical object representations: bridging visual neuroscience and deep learning

Organizers: Marieke Mur¹; ¹Western University

Object representations in the parietal cortex

Organizers: Erez Freud¹, Maryam Vaziri Pashkam², Yaoda Xu³; ¹York University, ²National Institute of Mental Health, ³Yale University

Continuous psychophysics

Organizers: Johannes Burge¹, Kathryn Bonnen²; ¹University of Pennsylvania, ²Indiana University

Symposia

Critical Perspectives On Vision Science: Towards Unbiasing Our Methods and Role in Knowledge Production

Friday, May 19, 2023, 12:00 - 2:00 pm EDT, Talk Room 1

Organizers: Eline Kupers¹, Kathryn Graves², Kimele Persaud³; ¹Stanford University, ²Yale University, ³Rutgers University

Presenters: Sholei Croom, Pawan Sinha, Jasmine Kwasa, Joel E Martinez, Vassiki S Chauhan

Discussions around Diversity, Equity, and Inclusion (DEI) have become commonplace in academia and have resulted in new institutional policies to promote the success of underrepresented populations. But how do we, as a vision science community with various subfields, theoretical constructs, and methodologies, address DEI issues in our research? The goal of this symposium is to provide a critical lens to the history of vision science as a knowledge production process, identify biases and discrepancies in our current methods, and highlight specific solutions to make vision science, as well as our community, more inclusive and impactful.

Presentations

Making the Case for Critical Vision Science: Beyond Diversity, Equity and Inclusion

Sholei Croom¹; ¹Johns Hopkins University

Looking Beyond Parochial Participant Pools

Pawan Sinha¹; ¹Massachusetts Institute of Technology (MIT)

Addressing Racial and Phenotypic Bias in Human Neuroscience Methods

Jasmine Kwasa¹; ¹Carnegie Mellon University

Facecraft: Race Reification in Psychological Research with Faces

Joel E Martinez¹; ¹Harvard University

Scientists in Context

Vassiki S Chauhan¹; ¹Barnard College

Symposia

How does the brain combine generative models and direct discriminative computations for visual inference?

Friday, May 19, 2023, 12:00 - 2:00 pm EDT, Talk Room 2

Organizers: Benjamin Peters¹, Nikolaus Kriegeskorte¹; ¹Columbia University

Presenters: Benjamin Peters, Ralf Haefner, Divya Subramanian, Doris Tsao, Thomas Naselaris

A prevalent view in vision science is that of vision as an inference process, where sensory evidence is evaluated in the context of a generative model that captures prior knowledge about the world. In this conception, visual inference is thought to involve top-down predictions of sensory data serving to evaluate the likelihood of alternative hypotheses. An alternative conception describes vision as a sequence of largely feedforward discriminative computations that filter and transform the visual information so as to represent behaviorally relevant information. This symposium will seek a unified understanding of how primate vision might combine generative models and discriminative computations.

Presentations

Naturalistic primate vision combines generative and discriminative computations

Benjamin Peters¹; ¹Columbia University

Behavioral and neural evidence that the visual system performs approximate inference in a hierarchical generative model

Ralf Haefner¹; ¹University of Rochester

Bayesian and Discriminative Models for Visual Stability across Saccades

Divya Subramanian^{1,2}, John M. Pearson¹, Marc A. Sommer¹; ¹Duke University, ²National Institutes of Health (NIH)

Probing for the existence of a generative model in the macaque face patch system

Doris Tsao^{1,2}; ¹UC Berkeley, ²Howard Hughes Medical Center

Why is the human visual system generative?

Thomas Naselaris¹; ¹University of Minnesota

Symposia

The Active Fovea

Friday, May 19, 2023, 2:30 - 4:30 pm EDT, Talk Room 1

Organizers: Martina Poletti¹, Martin Rolfs², Jude Mitchell¹; ¹University of Rochester, ²Humboldt-Universität

Presenters: Wolf Harmening, Martina Poletti, Hamutal Slovin, Lisa Kroell, Shanna Coop, Tong Zhang

This symposium will take the audience on a journey from the earliest steps of foveal processing at the retinal level to cortical processing in V1 and beyond. It will show how vision and oculomotor behavior are constantly intertwined at each level of processing to the point that behavior becomes an integral part of vision even at its finest scale. We will showcase the most recent advances in the field achieved with a blend of cutting-edge technologies and experimental techniques to propose a new, active view of foveal vision encompassing its interaction with fixational eye movements, saccades and peripheral vision.

Presentations

Non-random fixational drift and sub-cone resolution in the human fovea

Wolf Harmening¹, Jenny Witten¹; ¹University of Bonn, Department of Ophthalmology, Ernst-Abbe-Str. 2, 53127 Bonn, Germany

The nonhomogeneous foveola and the need for active vision at this scale

Martina Poletti¹, Ashley Clark¹, Sanjana Kapisthalam¹, Yue Zhang¹; ¹University of Rochester

A two-phase extra-retinal input into monkey's V1: the effect of fixational saccades on population responses

Hamutal Slovin¹, Nativ Yarden¹, Bouhnik Tomer¹; ¹The Leslie and Gonda (Goldschmied) Multidisciplinary Brain Res. Ctr., Bar-Ilan Univ., Ramat Gan, Israel

Foveal vision anticipates defining features of eye movement targets: converging evidence from human psychophysics

Lisa Kroell¹⁻², Martin Rolfs^{1,2,3,4}; ¹Department of Psychology, Humboldt-Universität zu Berlin, Germany, ²Berlin School of Mind and Brain, Humboldt-Universität zu Berlin, Germany, ³Exzellenzcluster Science of Intelligence, Technische Universität Berlin, Germany, ⁴Bernstein Center for Computational Neuroscience Berlin, Germany

Enhanced feature tuning for saccade targets in foveal but not peripheral visual neurons

Shanna Coop¹, Jacob Yates², Jude Mitchell³; ¹Neurobiology, Stanford University, USA, ²Department of Biology, University of Maryland College Park, USA, ³Brain and Cognitive Sciences, University of Rochester, USA

From the fovea to the periphery and back: mechanisms of trans-saccadic visual information transfer in the superior colliculus

Tong Zhang¹⁻², Ziad Hafed¹⁻²; ¹Werner Reichardt Center for Integrative Neuroscience, University of Tübingen, Tübingen, Germany 72076, ²Hertie Institute for Clinical Brain Research, University of Tübingen, Tübingen, Germany 72076

Symposia

The development of categorical object representations: bridging visual neuroscience and deep learning

Friday, May 19, 2023, 2:30 - 4:30 pm EDT, Talk Room 2

Organizers: Marieke Mur¹; ¹Western University

Presenters: Heather L Kosakowski, Michael J Arcaro, Katharina Dobs, Talia Konkle, Marieke Mur

The primate visual cortex develops rapidly over the first years of life. During this early learning period, object representations in high-level visual cortex begin to emphasize categories of ecological relevance such as faces and animals. How these categorical object representations emerge over the course of development is not well understood. Is development solely driven by visual experience? What constraints may additionally shape the development of categorical object representations? This symposium seeks to answer these key questions by integrating the latest work on visual object learning in the fields of developmental and computational neuroscience.

Presentations

Parallel development of cortical regions that support higher-level vision and cognition

Heather L Kosakowski¹; ¹Harvard University

Topographic constraints on visual development

Michael J Arcaro¹; ¹University of Pennsylvania

Using deep neural networks to test possible origins of human face perception

Katharina Dobs¹; ¹Justus-Liebig University Giessen

Leveraging deep neural networks for learnability arguments

Talia Konkle¹, Colin Connell¹, Jacob Prince¹, George Alvarez¹; ¹Harvard University

Bridging visual developmental neuroscience and deep learning: challenges and future directions

Marieke Mur¹; ¹Western University

Symposia

Object representations in the parietal cortex

Friday, May 19, 2023, 5:00 - 7:00 pm EDT, Talk Room 1

Organizers: Erez Freud¹, Maryam Vaziri Pashkam², Yaoda Xu³; ¹York University, ²National Institute of Mental Health, ³Yale University

Presenters: Maryam Vaziri-Pashkam, Vladislav Ayzenberg, Anne B. Sereno, Erez Freud, Stefania Bracci, Yaoda Xu

Understanding visual object representation is essential to understanding primate vision. Recent evidence shows that the dorsal visual pathway contains robust object representations. How shall we make sense of such representations? By bringing together six speakers studying object representations from different perspectives and using diverse approaches, this symposium aims to characterize the nature of dorsal object representations and elucidate their functional significance and developmental trajectories. Each speaker will also share their thoughts on what they think are the critical unanswered questions and whether it is possible to form a unified view of the role of the parietal cortex in object processing.

Presentations

Two pathways for processing object shapes

Maryam Vaziri-Pashkam¹; ¹Laboratory of Brain and Cognition, National Institute of Mental Health

Dorsal and ventral visual pathways: An expanded neural framework for object recognition

Vladislav Ayzenberg¹, Marlene Behrmann^{1,2}; ¹Neuroscience Institute and Psychology Department, Carnegie Mellon University, ²Department of Ophthalmology, University of Pittsburgh

Independence, not interactions: What simulations suggest about ventral and dorsal pathways.

Anne B. Sereno^{1,2}, Zhixian Han²; ¹Psychological Sciences Department, Purdue University, ²Weldon School of Biomedical Engineering, Purdue University

Object representations in the dorsal pathway are subject to a protracted and susceptible developmental trajectory.

Erez Freud¹; ¹Department of Psychology and the Centre for Vision Research, York University

The role of behavioral goals in shaping object representations in the two visual pathways.

Stefania Bracci¹, Hans Op de Beeck²; ¹Center for Mind/Brain Sciences - CIMEC, University of Trento, Rovereto (TN), Italy, ²KU Leuven, Leuven Brain Institute, Brain & Cognition Research Unit, Leuven, 3000, Belgium.

Adaptive visual object representation in the human posterior parietal cortex

Yaoda Xu¹; ¹Psychology Department, Yale University

Symposia

Continuous psychophysics

Friday, May 19, 2023, 5:00 - 7:00 pm EDT, Talk Room 2

Organizers: Johannes Burge¹, Kathryn Bonnen²; ¹University of Pennsylvania, ²Indiana University

Presenters: Johannes Burge, Constantin Rothkopf, David Burr, Clara Mestre, Pascal Mamassian

Continuous psychophysics is a recent and potentially paradigm-shifting methodological advance in the science of perception and action. While traditional psychophysics (e.g. forced-choice, two-alternative tasks) usually acquires measurements on the time-scale of seconds, the computations driving perception and action often take place on the time-scale of milliseconds. Continuous psychophysics closes this temporal gap, providing information about temporal dynamics with millisecond-scale precision. This symposium will showcase prominent examples of the topics that can be investigated with this approach: depth and motion perception, temporal integration, perception & action, numerosity, visual development, and confidence/metacognition.

Presentations

Continuous psychophysics: Past, Present, and Future

Johannes Burge¹, Kathryn Bonnen²; ¹University of Pennsylvania, ²Indiana University

Putting perception into action: Inverse optimal control for continuous psychophysics

Constantin Rothkopf¹, Dominik Straub¹; ¹Technical University of Darmstadt, Germany

Continuous tracking as a general tool to study the dynamics and context effects of human perception

David Burr¹, Pierfrancesco Ambrosi¹, Guido Marco Cicchini²; ¹University of Florence, Florence, Italy, ²National Research Council, Pisa, Italy

Applications of continuous tracking to typical and atypical visual development

Clara Mestre¹, Colin Downey¹; ¹Indiana University

Visuo-motor confidence

Pascal Mamassian¹, Shannon Locke¹, Alexander Goettker², Karl Gegenfurtner²; ¹CNRS & École normale supérieure, Paris, France, ²Justus-Liebig University Giessen, Giessen, Germany, ³New York University, New York, NY

Talk Sessions

Saturday, May 20

Time

8:15 am	Face Perception: Disorders, individual differences, and social cognition	Perceptual Organization: Bistability, representation
10:45 am	Materials, Objects and Perception	Eye Movements: Perception, cognition
2:30 pm	Development: Infancy	Artificial neural networks and vision
5:15 pm	Intuitive Physics and Event Perception	Temporal Processing

Sunday, May 21

Time

8:15 am	Perceptual Organization: Motion, texture	Multisensory Processing
10:45 am	Plasticity and Learning 1	Perception and Action: Reach, grasp, walk
2:30 pm	Object Recognition: Artificial neural networks, models	Visual Search: Attention, memory
5:15 pm	Attention: Mechanisms and models	Color, Light and Materials: Cones to cognition

Monday, May 22

Time

8:15 am	Spatial Vision	Motion: Neural mechanisms, models, perception
10:45 am	Development: Disorders	3D: Disparity and shape

Tuesday, May 23

Time

8:15 am	Plasticity and Learning 2	Binocular Vision
10:45 am	Visual Memory: Space, time, features, objects	Object Recognition: Categories, neural mechanisms
2:30 pm	Eye Movements: Neural processes and models	Scene Perception
5:15 pm	Attention: Models, individual differences, reward, capture, shifting	Visual Working Memory

Wednesday, May 24

Time

8:15 am	Perceptual Decision-Making and Confidence	Visual Search
10:45 am	Attention: Spatial, featural, temporal, divided	Face Perception: Neural mechanisms and models

Face Perception: Disorders, individual differences, and social cognition

Talk Session: Saturday, May 20, 2023, 8:15 – 9:45 am EDT, Talk Room 1

Moderator: Brad Duchaine, Dartmouth

Talk 1, 8:15 am, 21.11

Strong modulation of face distortions in prosopometamorphopsia by color

Antônio Mello¹, Daniel Stehr¹, Krzysztof Bujarski¹, Viola Störmer¹, Brad Duchaine¹; ¹Dartmouth College

Talk 2, 8:30 am, 21.12

Tracking the emergence of hyperfamiliarity for faces: Late covert discrimination followed by hyperfamiliarity due to disrupted post-perceptual processes

Marie-Luise Kieseler¹ (mlk.gr@dartmouth.edu), Katie Fisher², Rebecca Nako², Kira Noad³, David Watson³, Timothy Andrews³, Martin Eimer², Brad Duchaine¹; ¹Dartmouth College, ²Birkbeck College, University of London, ³University of York

Talk 3, 8:45 am, 21.13

Weaker face recognition in adults with autism arises from perceptually based alterations

Marissa Hartston¹ (ron.marissa@gmail.com), Yoni Pertsov², Galia Avidan³, Bat-Sheva Hadad¹; ¹University of Haifa, ²The Hebrew University of Jerusalem, ³Ben-Gurion University of the Negev

Talk 4, 9:00 am, 21.14

In the face of diversity: Face ethnicity influences the use of face features for social trait perception

Valentina Gosetti¹, Laura B. Hensel¹, Robin A. A. Ince¹, Oliver G. B. Garrod¹, Philippe G. Schyns¹, Rachael E. Jack¹; ¹University of Glasgow

Talk 5, 9:15 am, 21.15

The face of mischief: A stereotyped signal of norm violation within a Magic Circle

Loren Matelsky¹ (loren@newschool.edu), Hong B. Nguyen¹, Colleen Macklin¹, Benjamin van Buren¹; ¹The New School for Social Research

Talk 6, 9:30 am, 21.16

The spatiotemporal dynamics of social scene perception in the human brain

Emalie McMahon¹, Taylor Abel², Jorge Gonzalez-Martinez², Michael F. Bonner¹, Avniel Ghuman², Leyla Isik¹; ¹Johns Hopkins University, ²University of Pittsburgh

Perceptual Organization: Bistability, representation

Talk Session: Saturday, May 20, 2023, 8:15 – 9:45 am EDT, Talk Room 2

Moderator: Cathleen Moore, University of Iowa

Talk 1, 8:15 am, 21.21

Perceptual Organization is Limited in the Peripheral Vision

Cathleen Moore¹ (cathleen-moore@uiowa.edu), Qingzi Zheng¹, Nicole Jardine; ¹University of Iowa

Talk 2, 8:30 am, 21.22

Perceptual popout may be linked to de-suppression of orientation-untuned surround suppression in macaque V1

Xingnan ZHAO¹ (zhaoxingnan@pku.edu.cn), Shenghui ZHANG¹, Shiming Tang^{1,2,4}, Cong Yu^{1,3,4}; ¹PKU-Tsinghua Center for Life Sciences, Peking University, ²School of Life Sciences, ³School of Psychological and Cognitive Sciences, ⁴IDG-McGovern Institute for Brain Research, Peking University

Talk 3, 8:45 am, 21.23

Neural representation of occluded objects in visual cortex

Courtney Mansfield¹ (courtneymansfield@hotmail.co.uk), Tim Kietzmann², Jasper van den Bosch³, Ian Charest⁴, Marieke Mur⁵, Nikolaus Kriegeskorte⁶, Fraser Smith¹; ¹University of East Anglia, ²University of Osnabruck, ³University of Birmingham, ⁴Universite de Montreal, ⁵Brain and Mind Institute, Western University, ⁶Zuckerman Institute, Columbia University

Talk 4, 9:00 am, 21.24

Gestalt formation promotes awareness of suppressed visual stimuli during binocular rivalry

Mar Nikiforova¹ (mnikiforova@umass.edu), Rosemary Cowell, David Huber; ¹University of Massachusetts, Amherst

Talk 5, 9:15 am, 21.25

How many perceptual categories do observers experience during visual multistability?

Jan Skerswetat¹ (j.skerswetat@northeastern.edu), Peter J. Bex¹; ¹Northeastern University, USA

Talk 6, 9:30 am, 21.26

Increasing Interocular Grouping Demands during Binocular Rivalry with MEG

Eric Mokri¹ (eric.mokri@mail.mcgill.ca), Jason da Silva Castanheria¹, Janine D. Mendola¹; ¹McGill University

Materials, Objects and Perception

Talk Session: Saturday, May 20, 2023, 10:45 am – 12:30 pm EDT, Talk Room 1

Moderator: Bei Xiao, American University

Talk 1, 10:45 am, 22.11

Behaviourally relevant image structure linked with visual sampling and perception of materials

Alexandra C. Schmid¹, Matthias Nau¹, Chris I. Baker¹; ¹National Institutes of Health

Talk 2, 11:00 am, 22.12

Shared Representation of Different Material Categories: Transfer Learning of Crystals From Soaps

Chenxi Liao¹, Masataka Sawayama², Bei Xiao¹; ¹American University, ²The University of Tokyo

Talk 3, 11:15 am, 22.13

Material perception diagnosticity of visual product interaction.

Aaron Kaltenmaier^{1,2}, Maarten Wijntjes¹; ¹Technical University Delft, ²University College London

Talk 4, 11:30 am, 22.14

Measuring Object Recognition Ability: Reliability, Validity, and the Aggregate z-score Approach.

Conor J. R. Smithson¹ (conor.smithson@vanderbilt.edu), Jason K. Chow¹, Ting-Yun Chang¹, Isabel Gauthier¹;
¹Vanderbilt University

Talk 5, 11:45 am, 22.15

The Beholder's Share: Cross-subject Variability in Responses to Abstract Art

Celia Durkin^{1,4} (ced2166@columbia.edu), Benjamin Peters^{1,4}, Christopher Baldassano¹, Eric Kandel^{2,3,4}, Daphna Shohamy^{1,2,3,4}; ¹Columbia University Psychology Department, ²Howard Hughes Medical Institute, ³Kavli Institute for Brain Science, ⁴Zuckerman Mind, Brain Behavior Institute

Talk 6, 12:00 pm, 22.16

A solution to the ill-posed problem of common factors in vision

Dario Gordillo¹, Aline Cretenoud¹, Simona Garobbo¹, Michael H. Herzog¹; ¹Laboratory of Psychophysics, Brain Mind Institute, School of Life Sciences, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

Talk 7, 12:15 pm, 22.17

Toward a computational neuroscience of visual cortex without deep learning

Atlas Kazemian¹, Eric Elmoznino¹, Michael Bonner¹; ¹Johns Hopkins University

Eye Movements: Perception, cognition

Talk Session: Saturday, May 20, 2023, 10:45 am – 12:30 pm EDT, Talk Room 2

Moderator: Jorge Otero-Millan, UC Berkeley

Talk 1, 10:45 am, 22.21

Motion signals at the target of saccadic eye movements modulate presaccadic foveal perception and drive predictive gaze responses

Lisa M. Kroell^{1,2} (lisa.maria.kroell@hu-berlin.de), Jude F. Mitchell³, Martin Rolfs^{1,2}; ¹Humboldt-University of Berlin, ²Berlin School of Mind and Brain, ³University of Rochester

Talk 2, 11:00 am, 22.22

Cortical spatiotemporal reformatting tuned to saccadic amplitude

Alessandro Benedetto^{1,2} (aml.benedetto@gmail.com), Michele A. Cox^{1,2}, Samantha K. Jenks^{1,2}, Jonathan D. Victor³, Michele Rucci^{1,2}; ¹Department of Brain and Cognitive Sciences, University of Rochester, NY, USA, ²Center for Visual Science, University of Rochester, NY, USA, ³Feil Family Brain and Mind Research Institute, Weill Cornell Medical College, NY, USA

Talk 3, 11:15 am, 22.23

Visual stability and motor updating in autistic symptomatology.

Antonella Pomè¹, Eckart Zimmermann²; ¹Heinrich Heine University Düsseldorf

Talk 4, 11:30 am, 22.24

Thinks are looking up: The extrafoveal preview effect is the largest at the upper vertical meridian, where peripheral sensitivity is worst

Xiaoyi Liu¹ (xl4251@nyu.edu), David Melcher¹, Marisa Carrasco², Nina Hanning^{2,3}; ¹New York University Abu Dhabi, ²New York University, ³Humboldt-Universität zu Berlin

Talk 5, 11:45 am, 22.25

Motion blur near the resolution limit of the parafoveal retina

Alisa Braun¹ (alisa_braun@berkeley.edu), Isabel L Groth¹, Jorge Otero-Millan¹, William S Tuten¹; ¹UC Berkeley

Talk 6, 12:00 pm, 22.26

Modeling internal state changes in free-viewing and visual search scanpaths with gain control in DeepGaze III

Matthias Kümmerer¹ (matthias.kuemmerer@bethgelab.org), Matthias Bethge¹; ¹University of Tübingen, Tuebingen AI Center

Talk 7, 12:15 pm, 22.27

VR training produces more expert-like gaze behaviour in tennis players on-court

David Mann¹ (d.mann@vu.nl), Laure Soepenbergh¹, Joost Bosschert², Han Hakkens², Aldo Hoekstra³; ¹Vrije Universiteit Amsterdam, ²SportsImprov, ³Royal Dutch Lawn Tennis Association (KNLTB)

Development: Infancy

Talk Session: Saturday, May 20, 2023, 2:30 – 4:15 pm EDT, Talk Room 1

Moderator: Lisa Oakes, UC Davis

Talk 1, 2:30 pm, 24.11

Visual experience drives the development of novel and reliable visual representations from endogenously structured networks

Sigrid Trägenap¹ (traegenap@fias.uni-frankfurt.de), David E. Whitney², David Fitzpatrick², Matthias Kaschube^{1,3}; ¹Frankfurt Institute for Advanced Studies, ²Department of Functional Architecture and Development of Cerebral Cortex, Max Planck Florida Institute for Neuroscience, Jupiter, Florida, USA, ³Goethe University Frankfurt, Department of Computer Science, Germany

Talk 2, 2:45 pm, 24.12

Slow change: An analysis of infant egocentric visual experience

Saber Sheybani¹ (sheybani@iu.edu), Zoran Tiganj¹, Justin N. Wood¹, Linda B. Smith¹; ¹Indiana University Bloomington

Talk 3, 3:00 pm, 24.13

Influences of the home visual environment on infant attention: insights from remote webcam eye tracking

Denise M Werchan¹ (denise.werchan@nyulangone.org), Moriah E Thomason¹, Natalie H Brito²; ¹NYU Langone Health, ²New York University

Talk 4, 3:15 pm, 24.14

The statistics of infants' natural visual experience are shaped by motor development.

Zachary Petroff¹ (zpetroff@iu.edu), T. Rowan Candy¹, Kathryn Bonnen¹; ¹Indiana University

Talk 5, 3:30 pm, 24.15

Evaluation of Graph-Based Visual Saliency model using infant fixation data

Brianna K. Hunter¹ (bkhunter@ucdavis.edu), Shannon Klotz¹, Michaela DeBolt¹, Steven Luck¹, Lisa Oakes¹; ¹University of California, Davis

Talk 6, 3:45 pm, 24.16

Infants are sensitive to the Edge Orientation Entropy of Natural Scenes

Philip McAdams¹, Sara Svobodova¹, Taysa-Ja Newman¹, Kezia Terry¹, Alice Skelton¹, Anna Franklin¹; ¹Sussex Colour Group & Baby Lab, School of Psychology, University of Sussex, UK

Talk 7, 4:00 pm, 24.17

What happens to change-detection if you take away the task? Assessing adult and infant fixation preferences while passively viewing change-detection arrays

Shannon Ross-Sheehy¹ (rosssheehy@utk.edu), Victoria Jones¹, Esther Reynolds¹; ¹University of Tennessee

Artificial neural networks and vision

Talk Session: Saturday, May 20, 2023, 2:30 – 4:15 pm EDT, Talk Room 2

Moderator: Frank Tong, Vanderbilt University

Talk 1, 2:30 pm, 24.21

Harmonizing the visual strategies of image-computable models with humans yields more performant and interpretable models of primate visual system function.

Ivan Felipe Rodriguez¹ (ivan_felipe_rodriguez@brown.edu), Drew Linsley^{1,4}, Jay Gopal¹, Thomas Fel^{1,2}, Michael J. Acaro³, Saloni Sharma³, Margaret Livingstone³, Thomas Serre^{1,4}; ¹Brown University, ²Artificial and Natural Intelligence Toulouse Institute, ³Harvard University, ⁴Carney institue for Brain Science

Talk 2, 2:45 pm, 24.22

Canonical Dimensions of Neural Visual Representation

Zirui Chen¹ (zchen160@jhu.edu), Michael Bonner¹; ¹Johns Hopkins University

Talk 3, 3:00 pm, 24.23

Net2Brain: A Toolbox to compare artificial vision models with human brain responses

Domenic Bersch¹, Kshitij Dwivedi¹, Martina Vilas^{1,2}, Radoslaw Martin Cichy^{3,4,5}, Gemma Roig¹; ¹Johann Wolfgang Goethe-Universität Frankfurt, ²Ernst Struengmann Institute for Neuroscience, ³Department of Education and Psychology, Freie Universität Berlin, ⁴Berlin School of Mind and Brain, Faculty of Philosophy, ⁵Bernstein Center for Computational Neuroscience Berlin

Talk 4, 3:15 pm, 24.24

Unsupervised contrastive learning and supervised classification training have opposite effects on the human-likeness of CNNs during occluded object processing

David Coggan¹ (ddcoggan@gmail.com), Frank Tong¹; ¹Vanderbilt University

Talk 5, 3:30 pm, 24.25

Deep learning classifiers match human accuracies but not the quirks

Joseph MacInnes¹, Natalia Zhozhikashvili, Kirill Koretaev², Feurra Matteo³; ¹Swansea University, ²Purple Gaze, ³HSE University

Talk 6, 3:45 pm, 24.26

Noise reduction as a unified mechanism of perceptual learning in both artificial and biological visual systems

Yu-Ang Cheng^{1,2} (yuang_cheng@brown.edu), Ke Jia^{8,9,10}, Takeo Watanabe², Sheng Li^{4,5,6,7}, Ru-Yuan Zhang^{1,3}; ¹Institute of Psychology and Behavioral Science, Antai College of Economics and Behavioral Sciences, Shanghai Jiao Tong University, Shanghai, China, ²Brown University, Department of Cognitive, Linguistic and Psychological Sciences, RI, USA, ³Shanghai Mental Health Center, School of Medicine, Shanghai Jiao Tong University, Shanghai, China, ⁴School of Psychological and Cognitive Sciences, Peking University, Beijing, China, ⁵Beijing Key Laboratory of Behavior and Mental Health, Peking University, Beijing, China, ⁶PKU-IDG/McGovern Institute for Brain Research, Peking University, Beijing, China, ⁷Key Laboratory of Machine Perception (Ministry of Education), Peking University, Beijing, China, ⁸Department of Neurobiology, Affiliated Mental Health Center & Hangzhou Seventh People, ⁹Liangzhu Laboratory, MOE Frontier Science Center for Brain Science and Brain-machine Integration, State Key Laboratory of Brain-machine Intelligence, Zhejiang University, Hangzhou, China, ¹⁰NHC and CAMS Key Laboratory of Medical Neurobiology, Zhejiang University, Hangzhou, China

Talk 7, 4:00 pm, 24.27

Comparing motion and static feature selectivity between the macaque dorsal and ventral temporal visual cortical body patches

Rajani Raman^{1,2} (rajani.raman@kuleuven.be), Anna Bognár^{1,2}, Ghazaleh Ghamkhari Nejad^{1,2}, Nick Taubert³, Beatrice de Gelder^{4,5}, Martin A Giese³, Rufin Vogels^{1,2}; ¹Department of Neuroscience, KU Leuven, Leuven, Belgium, ²Leuven Brain Institute, KU Leuven, Leuven, Belgium, ³HIH&CIN, Department of Cognitive Neurology, University Clinic Tübingen, Tübingen, Germany, ⁴Faculty of Psychology and Neuroscience, Maastricht University, Maastricht, Netherlands, ⁵Department of Computer Science, University College London, London, United Kingdom

Intuitive Physics and Event Perception

Talk Session: Saturday, May 20, 2023, 5:15 – 6:45 pm EDT, Talk Room 1

Moderator: Jason Fischer, Johns Hopkins University

Talk 1, 5:15 pm, 25.11

The role of agentive and physical forces in the neural representation of motion events

Seda Akbiyik¹ (sakbiyik@fas.harvard.edu), Oliver Sussman¹, Moritz Wurm², Alfonso Caramazza^{1,2}; ¹Harvard University, ²Centre for Mind/Brain Sciences University of Trento

Talk 2, 5:30 pm, 25.12

Decoding the physics of actions in the dorsal visual pathway

Moritz Wurm¹ (moritz.wurm@unitn.it), Yiğit Erigüç¹; ¹University of Trento

Talk 3, 5:45 pm, 25.13

What does learning look like? Inferring epistemic intent from observed actions

Sholei Croom¹ (scroom1@jhu.edu), Hanbei Zhou¹, Chaz Firestone¹; ¹Johns Hopkins University

Talk 4, 6:00 pm, 25.14

That's just how I roll!: Predicting and remembering objects' locations via the perception of frictive surface contact

Hong B. Nguyen¹ (nguyh376@newschool.edu), Benjamin van Buren¹; ¹The New School

Talk 5, 6:15 pm, 25.15

Using fMRI to study the neural basis of violation-of-expectation

Shari Liu^{1,2} (shariliu@jhu.edu), Kirsten Lydic², Rebecca Saxe²; ¹Johns Hopkins University, ²Massachusetts Institute of Technology

Talk 6, 6:30 pm, 25.16

"Things" versus "Stuff" in the Brain

Vivian C. Paulun¹ (vpaulun@mit.edu), RT Pramod¹, Nancy Kanwisher¹; ¹Massachusetts Institute of Technology

Temporal Processing

Talk Session: Saturday, May 20, 2023, 5:15 – 6:45 pm EDT, Talk Room 2

Moderator: Pascal Mamassian, Ecole Normale Supérieure and CNRS

Talk 1, 5:15 pm, 25.21

Event-based warping: An illusory distortion of time within events

Rui Zhe Goh¹ (rgoh1@jhu.edu), Hanbei Zhou¹, Chaz Firestone¹, Ian Phillips¹; ¹Johns Hopkins University

Talk 2, 5:30 pm, 25.22

Interocular binding of chromatic signals across time

Benjamin M Chin¹ (bechin@sas.upenn.edu), Johannes Burge¹; ¹University of Pennsylvania

Talk 3, 5:45 pm, 25.23

The temporal sensitivity of visual cortex reflects an eccentricity-dependent variation in surround inhibition

Carlyn Patterson Gentile^{1,2} (pattersonc@chop.edu), Manuel Spitschan^{3,4}, Huseyin Taskin¹, Andrew Bock¹, Geoffrey Aguirre¹; ¹University of Pennsylvania Perelman School of Medicine, Philadelphia, PA, ²Children's Hospital of Philadelphia, Philadelphia, PA, ³Translational Sensory & Circadian Neuroscience, Max Planck Institute for Biological Cybernetics, Tübingen, Germany, ⁴Chronobiology & Health, TUM Department of Sport and Health Sciences (TUM SG), Technical University of Munich, Munich, Germany

Talk 4, 6:00 pm, 25.24

Alpha power modulates long-lasting feature integration

Maëlan Q. Menétréy¹ (maelan.menetrey@epfl.ch), Michael H. Herzog¹, David Pascucci¹; ¹Laboratory of Psychophysics, École Polytechnique Fédérale de Lausanne (EPFL)

Talk 5, 6:15 pm, 25.25

Serial Dependence Biases Realistic Skin Cancer Diagnosis

Zhihang Ren¹ (peter.zhren@berkeley.edu), Xinyu Li¹, Dana Pietralla², Mauro Manassi³, Stella Yu^{1,4}, David Whitney¹; ¹University of California, Berkeley, ²University of Cologne, ³University of Aberdeen, ⁴University of Michigan, Ann Arbor

Talk 6, 6:30 pm, 25.26

Overestimated speed at short durations creates a novel motion-position dissociation

Pascal Mamassian¹ (pascal.mamassian@ens.fr); ¹Ecole Normale Supérieure and CNRS

Perceptual Organization: Motion, texture

Talk Session: Sunday, May 21, 2023, 8:15 – 9:45 am EDT, Talk Room 1

Moderator: Michael Morgan, City, University of London

Talk 1, 8:15 am, 31.11

Extent of the "fading mirror" phenomenon as a function of image statistics of the ground texture for mirror placement

Kazushi Maruya¹ (kazushi.maruya.zb@hco.ntt.co.jp), Tomoko Ohtani²; ¹NTT Communication Science Laboratories, ²Meiji University

Talk 2, 8:30 am, 31.12

Spatial Mechanisms Mediating Visual Responses to Symmetries in Textures

Yara Iskandar¹ (misk22@my.yorku.ca), Christopher Lee^{1,3}, Sebastian Bosse², Peter J Kohler¹; ¹York University, Toronto, ON, Canada, ²Fraunhofer HHI, Germany, ³Image Engine Design Inc., Vancouver, BC, Canada

Talk 3, 8:45 am, 31.13

A replication and reanalysis of a classic texture segmentation study

Maria Kon¹ (mkon@purdue.edu), Gregory Francis¹; ¹Purdue University

Talk 4, 9:00 am, 31.14

Distinct rules for binding in position-based and velocity-based motion systems

Ilker Duymaz¹ (duymaz@sabanciuniv.edu), Nihan Alp¹; ¹Sabanci University, Istanbul, Turkey

Talk 5, 9:15 am, 31.15

Neural correlates of perceptual motion integration and segmentation of locally paired and unpaired random-dot stimuli.

Bikalpa Ghimire¹ (bghimire2@wisc.edu), Xin Huang¹; ¹University of Wisconsin- Madison

Talk 6, 9:30 am, 31.16

Object solidity disambiguates ambiguous motion

Dawei Bai¹ (dawei.bai@ens.fr), Brent Strickland^{1,2}; ¹École Normale Supérieure, PSL Research University, Institut Jean Nicod (ENS, EHESS, CNRS), Paris, France, ²Africa Business School; School of Collective Intelligence - UM6P - Rabat, Morocco

Multisensory Processing

Talk Session: Sunday, May 21, 2023, 8:15 – 9:45 am EDT, Talk Room 2

Moderator: Patrizia Fattori, University of Bologna

Talk 1, 8:15 am, 31.21

Visual cortical regions carry information about auditory attention

Abigail Noyce¹, Weizhe Guo¹, Wenkang An², Barbara Shinn-Cunningham¹; ¹Carnegie Mellon University, ²Boston Children's Hospital

Talk 2, 8:30 am, 31.22

Visual vs. Auditory Landmark for Vestibular Self-motion Perception

Silvia Zanchi^{1,2,3,5} (silvia.zanchi@iit.it), Luigi Felice Cuturi^{1,4}, Giulio Sandini³, Monica Gori¹, Elisa Raffaella Ferrè⁵; ¹Unit of Visually Impaired People, Italian Institute of Technology, Genoa, Italy, ²DIBRIS Department, University of Genoa, Italy, ³Robotics Brain and Cognitive Sciences, Italian Institute of Technology, Genoa, Italy, ⁴Department of Cognitive, Psychological, Pedagogical Sciences and of Cultural Studies, University of Messina, Messina, Italy, ⁵Department of Psychological Sciences, Birkbeck, University of London, London, UK

Talk 3, 8:45 am, 31.23

Effect of subjective visual awareness on multisensory integration: evidence from behavioural data and computational modelling

Sanni Ahonen¹ (s.ahonen.21@abdn.ac.uk), Thomas Otto², Arash Sahraie¹; ¹University of Aberdeen, ²University of St Andrews

Talk 4, 9:00 am, 31.24

Interactions of body representations in rubber hand illusion and tool-use paradigms

Inci Ayhan¹ (inci.ayhan@boun.edu.tr), Alp Erkent¹, Emre Ugur¹, Erhan Oztop^{2,3}; ¹Bogazici University, Istanbul, Turkey, ²Ozyegin University, Istanbul, Turkey, ³Osaka University, Japan

Talk 5, 9:15 am, 31.25

Sensorimotor reorganization in visual cortex in brain-damaged individuals with primary somatosensory damage

Jared Medina¹, Yuqi Liu^{1,2}, Elizabeth J. Halfen³, Jeffrey M. Yau³, Simon Fischer-Baum⁴, Peter Kohler⁵, Olufunsho Faseyitan⁶, H. Branch Coslett⁶; ¹University of Delaware, ²Chinese Academy of Neuroscience, ³Baylor College of Medicine, ⁴Rice University, ⁵York University, ⁶University of Pennsylvania

Talk 6, 9:30 am, 31.26

Narrative, not low-level vision, synchronises audiences during television viewing

Hugo Hammond¹ (hugo.hammond@bristol.ac.uk), Michael Armstrong², Graham Thomas², Edwin Dalmajer¹, Iain Gilchrist¹; ¹University of Bristol, ²BBC Research and Development, UK

Plasticity and Learning 1

Talk Session: Sunday, May 21, 2023, 10:45 am – 12:30 pm EDT, Talk Room 1

Moderator: Kristina Visscher, UAB, University of Alabama, Birmingham

Talk 1, 10:45 am, 32.11

The effect of consolidation and explicitness on learning and transferring higher-level structural knowledge in vision

Dominik Garber^{1,2} (garber_dominik@phd.ceu.edu), Jozsef Fiser^{1,2}; ¹Department of Cognitive Science, Central European University, ²Center for Cognitive Computation, Central European University

Talk 2, 11:00 am, 32.12

Neuromodulatory functions (reward and arousal) induce separate effects on visual perceptual learning (VPL) of a salient but goal-irrelevant visual feature

Zhiyan Wang¹ (zhiyan.wang@psychologie.uni-regensburg.de), Mark Greenlee¹; ¹University of Regensburg, Germany

Talk 3, 11:15 am, 32.13

Plasticity in early visual cortex is modulated by feature salience in task-irrelevant visual perceptual learning

Markus Becker¹ (markus.becker@ur.de), Jennifer Lubich¹, Sebastian Frank¹; ¹University of Regensburg

Talk 4, 11:30 am, 32.14

Pupillometric signature of implicit learning

Paola Binda¹ (paola1binda@gmail.com), Chiara Terzo², Marco Turi^{3,4}, David C. Burr²; ¹University of Pisa, ²University of Florence, ³University of Salento, ⁴Fondazione Stella Maris Mediterraneo

Talk 5, 11:45 am, 32.15

How does attentional capture with statistical learning accelerate perception?

Abbey Nydam¹ (a.s.nydam@gmail.com), Jay Pratt¹; ¹University of Toronto

Talk 6, 12:00 pm, 32.16

Inner retinal integrity correlates with preservation of fine direction discrimination in the blind-field early after V1 damage

Bryan Redmond^{1,2} (bryan_redmond@urmc.rochester.edu), Matthew Cavanaugh², Berkeley Fahrenthold², Jingyi Yang^{1,2}, Krystel Huxlin²; ¹University of Rochester School of Medicine & Dentistry, ²Flaum Eye Institute

Talk 7, 12:15 pm, 32.17

Competitive neurocognitive networks underlying visual statistical learning

Dezso Nemeth¹ (dezso.nemeth@inserm.fr), Teodora Vékony¹; ¹INSERM, CRNL, Lyon, France

Perception and Action: Reach, grasp, walk

Talk Session: Sunday, May 21, 2023, 10:45 am – 12:30 pm EDT, Talk Room 2

Moderator: William Warren, Brown University

Talk 1, 10:45 am, 32.21

Decoding Features of Real-world Navigation from the Human Hippocampus

Kathryn N. Graves¹ (kathryn.graves@yale.edu), Ariadne Letrou¹, Tyler E. Gray², Imran H. Quraishi², Nicholas B. Turk-Browne^{1,3}; ¹Department of Psychology, Yale University, ²Department of Neurology, Yale University, ³Wu Tsai Institute, Yale University

Talk 2, 11:00 am, 32.22

Dynamic collision envelope in virtual reality walking with colliding pedestrians

Jae-Hyun Jung¹ (jaehyun_jung@meei.harvard.edu), Alex Hwang², Jonathan Doyon³, Sujin Kim⁴; ¹Department of Ophthalmology, Harvard Medical School, ²Schepens Eye Research Institute of Massachusetts Eye and Ear

Talk 3, 11:15 am, 32.23

Motion Energy Modulates Feature Tracking in Human Locomotor Control

Zhenyu Zhu¹ (zhenyu_zhu@brown.edu), William H. Warren¹; ¹Brown University

Talk 4, 11:30 am, 32.24

Visual detection while walking: Sensitivity modulates over the gait cycle

Cameron Phan¹ (cpha4652@uni.sydney.edu.au), David Alais¹, Frans Verstraten¹, Matthew Davidson¹; ¹University of Sydney

Talk 5, 11:45 am, 32.25

MEG signatures of arm posture coding and integration into movement plans

Gunnar Blohm¹ (gunnar.blohm@queensu.ca), Doug Cheyne², Doug Crawford³; ¹Queen's University, Centre for Neuroscience Studies, VISTA, CAPnet, ²University of Toronto, The Hospital for Sick Children Research Institute, ³York University, Centre for Vision Research, VISTA, CAPnet

Talk 6, 12:00 pm, 32.26

Sensorimotor adaptation reveals systematic biases of 3D estimates for reach-to-grasp actions.

Chaeun Lim¹ (chaeun_lim@brown.edu), Fulvio Domini¹; ¹Brown University

Talk 7, 12:15 pm, 32.27

Human see, human do: comparing visual and motor representations of hand gestures

Hunter Schone^{1,2} (hunter.schone@nih.gov), Tamar Makin^{2,3}, Chris Baker¹; ¹Laboratory of Brain & Cognition, National Institute of Mental Health, National Institutes of Health, ²Institute of Cognitive Neuroscience, University College London, ³MRC Cognition and Brain Sciences Unit, University of Cambridge

Object Recognition: Artificial neural networks, models

Talk Session: Sunday, May 21, 2023, 2:30 – 4:15 pm EDT, Talk Room 1

Moderator: Marieke Mur, Western University

Talk 1, 2:30 pm, 34.11

A large and rich EEG dataset for modeling human visual object recognition

Alessandro T. Gifford¹ (alessandro.gifford@gmail.com), Kshitij Dwivedi², Gemma Roig², Radoslaw M. Cichy¹; ¹Freie Universität Berlin, ²Goethe Universität Frankfurt am Main

Talk 2, 2:45 pm, 34.12

Torchlens: A Python package for extracting and visualizing all hidden layer activations from arbitrary PyTorch models with minimal code

JohnMark Taylor¹ (johnmarkedwardtaylor@gmail.com), Nikolaus Kriegeskorte¹; ¹Columbia University

Talk 3, 3:00 pm, 34.13

Invariant object recognition in deep neural networks: impact of visual diet and learning goals

Haider Al-Tahan^{1,2}, Farzad Shayanfar, Ehsan Tousi¹, Marieke Mur¹; ¹Western University, ²Meta AI

Talk 4, 3:15 pm, 34.14

Local texture manipulation further illuminates the intrinsic difference between CNNs and human vision

Alish Dipani¹, Huaizu Jiang², MiYoung Kwon¹; ¹Department of Psychology, Northeastern University, Boston, MA, ²Khoury College of Computer Sciences, Northeastern University, Boston, MA

Talk 5, 3:30 pm, 34.15

Evaluating the influence of ML models on human judgment of non-physical attributes in images

Shruthi Sukumar^{1,2}, Vijay Veerabadran³, Jascha Sohl-Dickstein¹, Michael Mozer¹, Gamaleldin Elsayed¹; ¹Google Research, Brain Team, ²University of Colorado Boulder, ³University of California San Diego

Talk 6, 3:45 pm, 34.16

Reconstructing visual experience from a large-scale biologically realistic model of mouse primary visual cortex

Reza Abbasi-Asl¹ (reza.abbasiasl@ucsf.edu), Yizhou Chi¹, Huibo Yang¹, Kael Dai², Anton Arkhipov²; ¹UCSF, ²Allen Institute for Brain Sciences

Talk 7, 4:00 pm, 34.17

Can deep convolutional networks explain the semantic structure that humans see in photographs?

Siddharth Suresh^{1,2} (siddharth.suresh@wisc.edu), Kushin Mukherjee^{1,2}, Timothy T. Rogers^{1,2}; ¹University of Wisconsin-Madison, Department of Psychology, ²McPherson Eye Research Institute

Visual Search: Attention, memory

Talk Session: Sunday, May 21, 2023, 2:30 – 4:15 pm EDT, Talk Room 2

Moderator: Jeff Schall, York University, Canada

Talk 1, 2:30 pm, 34.21

The involvement of the temporo-parietal junction in attentional reorienting and stimulus evaluation

Cheol Hwan Kim¹ (cheol.hwan.kim2391@gmail.com), Jongmin Lee¹, Suk Won Han¹; ¹Chungnam National University

Talk 2, 2:45 pm, 34.22

Resolving stages of processing in visual search: Frontal eye field neurophysiology with two degrees of difficulty

Wanyi Lyu¹ (wanyilyu@yorku.ca), Thomas R. Reppert², Jeffrey D. Schall¹; ¹Department of Biology, Centre for Vision Research, Vision Science to Application, York University, Toronto ON Canada, ²Department of Psychology, University of the South, Sewanee TN USA

Talk 3, 3:00 pm, 34.23

What do neurons in the superior colliculus encode during visual search?

Abe Leite¹ (abrahamjleite@gmail.com), Hossein Adeli¹, Rakesh Nanjappa², Robert M. McPeck², Gregory J. Zelinsky¹; ¹Stony Brook University, ²SUNY College of Optometry

Talk 4, 3:15 pm, 34.24

Exploring the neural correlates of naturalistic hybrid search tasks

Matias Ison¹ (matias.ison@nottingham.ac.uk), Joaquin Gonzalez^{1,2}, Alessandra Barbosa¹, Damian Care², Anthony Ries³, Juan Kamienkowski²; ¹University of Nottingham, ²University of Buenos Aires & National Scientific and Technical Research Council, Argentina, ³U.S. Army Research Laboratory

Talk 5, 3:30 pm, 34.25

Explaining the guidance of search for real-world objects using quantitative similarity

Brett Bahle¹ (brettbahle@gmail.com), Steven J. Luck¹; ¹University of California - Davis

Talk 6, 3:45 pm, 34.26

Attention to object categories: Selection history determines the breadth of attentional

tuning during real-world object search

Douglas A. Addleman¹ (daddleman@dartmouth.edu), Reshma Rajasingh¹, Viola S. Stoermer¹; ¹Dartmouth College

Talk 7, 4:00 pm, 34.27

Searching for a target in a natural scene does not allow for robust recall of scene or target details that are irrelevant to response expectations

Ryan E O'Donnell¹ (ryanodonnell7@gmail.com), Nicolás Cárdenas-Miller¹, Joyce Tam¹, Dheeraj Varghese², Brad Wyble¹; ¹Pennsylvania State University, ²Vrije University

Attention: Mechanisms and models

Talk Session: Sunday, May 21, 2023, 5:15 – 7:15 pm EDT, Talk Room 1

Moderator: Sarah Shomstein, The George Washington University

Talk 1, 5:15 pm, 35.11

Direct attention-independent expectation effects on visual perception

Alon Zivony¹ (alonzivony@gmail.com), Martin Eimer¹; ¹Birkbeck, University of London

Talk 2, 5:30 pm, 35.12

Attentional Ungluing: Uncertainty modulates task-irrelevant object representations in human early visual cortex

Xiaoli Zhang¹ (xiaolizhang@gwu.edu), Andrew J. Collegio¹, Dwight J. Kravitz¹, Sarah Shomstein¹; ¹The George Washington University

Talk 3, 5:45 pm, 35.13

Perceptual awareness occurs along a graded continuum: Evidence from psychophysical scaling

Michael Cohen^{1,2} (michaelthecohen@gmail.com), Jonathan Keefe³, Timothy Brady³; ¹Amherst College, Department of Psychology, ²MIT, Department of Brain and Cognitive Sciences, ³UCSD, Department of Psychology

Talk 4, 6:00 pm, 35.14

Consequences of relaying top-down attentional modulations via neurons with high-dimensional selectivity

Sunyoung Park¹ (supark@ucsd.edu), John Serences¹; ¹University of California San Diego

Talk 5, 6:15 pm, 35.15

Frontocentral EEG activity phase predicts subsequent visual target detection in healthy participants but not in schizophrenia

Eric Reavis^{1,2} (ereavis@ucla.edu), Jonathan Wynn^{2,1}, Michael Green^{1,2}; ¹University of California, Los Angeles, ²VA Greater Los Angeles Healthcare System

Talk 6, 6:30 pm, 35.16

Top-down effects on Cross-Modal Stimulus Processing: A Predictive Coding Framework

Soukhin Das^{1,2} (skndas@ucdavis.edu), Sreenivasan Meyyappan^{1,2}, Mingzhou Ding³, George R. Mangun^{1,2};
¹Center for Mind and Brain, University of California Davis, ²Department of Psychology, University of California Davis, ³Pruitt Family Department of Biomedical Engineering, University of Florida

Talk 7, 6:45 pm, 35.17

A novel eye-tracking paradigm to investigate the focus of object-based attention

Lasyapriya Pidaparthi¹ (lasyapriya.pidaparthi@vanderbilt.edu), Frank Tong¹; ¹Vanderbilt University

Talk 8, 7:00 pm, 35.18

Reconstruction-guided attention improves the object recognition robustness of neural networks

Seoyoung Ahn¹ (ahnseoyoung@gmail.com), Hossein Adeli¹, Gregory Zelinsky¹; ¹Stony Brook University

Color, Light and Materials: Cones to cognition

Talk Session: Sunday, May 21, 2023, 5:15 – 7:15 pm EDT, Talk Room 2

Moderator: Karen Schloss, University of Wisconsin

Talk 1, 5:15 pm, 35.21

Psychophysical and image-based characterization of macular pigment using structured light

Andrew E. Silva¹ (a8silva@uwaterloo.ca), Connor Kapahi^{2,3}, David G. Cory^{3,5}, Mukhit Kulmaganbetov⁴, Melanie Mungalsingh¹, Taranjit Singh⁴, Benjamin Thompson^{1,4}, Dmitry A. Pushin^{2,3,4}, Dusan Sarenac^{3,4}; ¹School of Optometry and Vision Science, University of Waterloo, Waterloo, ON, Canada, ²Department of Physics and Astronomy, University of Waterloo, Waterloo, ON, Canada, ³Institute for Quantum Computing, University of Waterloo, Waterloo, ON, Canada, ⁴Centre for Eye and Vision Research, 17W Science Park, Hong Kong, ⁵Department of Chemistry, University of Waterloo, Waterloo, ON, Canada

Talk 2, 5:30 pm, 35.22

A deep convolutional neural network trained to infer surface reflectance is deceived by mid-level lightness illusions

Jaykishan Patel¹ (jay96@my.yorku.ca), Alban Flachot¹, Javier Vazquez-Corral², David H. Brainard³, Thomas S. A. Wallis⁴, Marcus A. Brubaker¹, Richard F. Murray¹; ¹York University, ²Universitat Autònoma de Barcelona, ³University of Pennsylvania, ⁴Technische Universität Darmstadt

Talk 3, 5:45 pm, 35.23

Dynamic achromatic color computation based on fixational eye movements and edge integration

Michael Rudd¹ (mrudd@unr.edu); ¹University of Nevada, Reno

Talk 4, 6:00 pm, 35.24

Color discrimination and chromatic balance perception after adaptation to natural and color-reflected scenes.

Beata Wozniak¹, John Maule¹, Anna Franklin¹, Jenny Bosten¹; ¹University of Sussex

Talk 5, 6:15 pm, 35.25

Predicting gloss sensitivity across variations in surface shape, illumination and viewpoint

Jacob R. Cheeseman¹ (jacob.cheeseman@psychol.uni-giessen.de), James A. Ferwerda², Takuma Morimoto^{1,3}, Roland W. Fleming^{1,4}; ¹Justus Liebig University Giessen, ²Rochester Institute of Technology, ³University of Oxford, ⁴Center for Mind, Brain and Behavior, Marburg, Germany

Talk 6, 6:30 pm, 35.26

Object-based computations for color constancy

Laysa Hedjar¹ (laysa.hedjar@psychol.uni-giessen.de), Raquel Gil Rodríguez¹, Matteo Toscani², Dar'ya Guarnera³, Giuseppe Claudio Guarnera^{3,4}, Karl R. Gegenfurtner¹; ¹Justus-Liebig-Universität Gießen, Germany, ²Bournemouth University, UK, ³Norwegian University of Science and Technology, Gjøvik, Norway, ⁴University of York, UK

Talk 7, 6:45 pm, 35.27

How do people map colors to concepts? Modeling assignment inference as evidence accumulation

Kushin Mukherjee¹ (kmukherjee2@wisc.edu), Laurent Lessard², Karen B. Schloss¹; ¹University of Wisconsin-Madison, ²Northeastern University

Talk 8, 7:00 pm, 35.28

Lexical effects on remembered colors

Delwin Lindsey¹ (lindsey.43@osu.edu), Pruthi Deshpande¹, Angela Brown¹; ¹The Ohio State University

Spatial Vision

Talk Session: Monday, May 22, 2023, 8:15 – 9:45 am EDT, Talk Room 1

Moderator: Dennis Levi, UC Berkeley

Talk 1, 8:15 am, 41.11

How do visual abilities relate to each other?

Simona Garobbio¹ (simona.garobbio@epfl.ch), Marina Kunchulia², Michael H. Herzog¹; ¹EPFL, ²Free University of Tbilisi

Talk 2, 8:30 am, 41.12

Spatial Frequency Maps in Human Visual Cortex: A Replication and Extension

Jiyeong Ha¹ (jiyeong.ha@nyu.edu), William Broderick², Kendrick Kay³, Jonathan Winawer¹; ¹New York University, ²Flatiron Institute, ³University of Minnesota

Talk 3, 8:45 am, 41.13

Crowding does not follow Gestalt principles in foveal and amblyopic vision

John A. Greenwood¹ (john.greenwood@ucl.ac.uk), Alexandra Zmuda¹, Annegret H. Dahlmann-Noor^{2,3}, Alexandra V. Kalpadakis-Smith¹; ¹University College London, London, UK, ²Moorfields Eye Hospital, London, UK, ³NIHR

Biomedical Research Centre, London, UK

Talk 4, 9:00 am, 41.14

A texture statistics encoding model reveals sensitivity to mid-level features across human visual cortex

Margaret Henderson¹ (mmhender@cmu.edu), Michael Tarr¹, Leila Wehbe¹; ¹Carnegie Mellon University

Talk 5, 9:15 am, 41.15

Mapping triangles and breads in shape spaces: a big-data approach to estimating category distributions

Filipp Schmidt^{1,2} (filipp.schmidt@psychol.uni-giessen.de), Roland W. Fleming^{1,2}; ¹Justus Liebig University Giessen, ²Center for Mind, Brain and Behavior (CMBB), Marburg and Giessen

Talk 6, 9:30 am, 41.16

V4 neurons are tuned for local and non-local features of natural planar shape

Timothy D. Oleskiw^{1,5} (oleskiw@nyu.edu), James H. Elder², Ingo Fruend⁶, Gerick M. Lee¹, Andrew Sutter^{1,3}, Anitha Pasupathy⁴, Eero P. Simoncelli^{1,5}, J. Anthony Movshon¹, Lynne Kiorpes¹, Najib Majaj¹; ¹New York University, ²York University, ³Drew University, ⁴University of Washington, ⁵Flatiron Institute Center for Computational Neuroscience, ⁶Verbally GmbH

Motion: Neural mechanisms, models, perception

Talk Session: Monday, May 22, 2023, 8:15 – 9:45 am EDT, Talk Room 2

Moderator: Alan Stocker, University of Pennsylvania

Talk 1, 8:15 am, 41.21

Laminar fMRI using spin-echo BOLD reveals feedback and feedforward representations in the human primary visual cortex

Royoung Kim^{1,2} (roespigas@gmail.com), SoHyun Han^{1,2}, Won Mok Shim^{1,2}; ¹Center for Neuroscience Imaging Research, Institute for Basic Science (IBS), Suwon, Korea, Republic of., ²Sungkyunkwan University (SKKU), Suwon, Korea, Republic of.

Talk 2, 8:30 am, 41.22

Temporal evolution processes of a motion-induced position shift ride neural theta oscillations

Ryohei Nakayama¹, Kaoru Amano², Ikuya Murakami¹; ¹Department of Psychology, The University of Tokyo, ²Graduate School of Information Science and Technology, The University of Tokyo

Talk 3, 8:45 am, 41.23

Observed social touch is processed in a rapid, feedforward manner: an EEG-fMRI fusion study

Haemy Lee Masson¹ (haemy.leemasson@jhu.edu), Leyla Isik¹; ¹Johns Hopkins University

Talk 4, 9:00 am, 41.24

What causes motion silencing

Qihan Wu¹ (qw30@jhu.edu), Jonathan I. Flombaum¹; ¹Johns Hopkins University

Talk 5, 9:15 am, 41.25

Knowledge of other's biomechanical constraints shapes movement perception

Antoine Vandenberghe¹ (antoine.vandenberghe@uclouvain.be), Gilles Vannuscorps^{1,2}; ¹Psychological Sciences Research Institute, Université catholique de Louvain, Belgium, ²Institute of Neuroscience, Université catholique de Louvain, Belgium

Talk 6, 9:30 am, 41.26

Heading estimation from optic flow is Bayesian but strongly modulated by the size of the experimental response range

Linghao Xu¹ (linghaoxu11@gmail.com), Qi Sun^{2,3}, Alan Stocker⁴; ¹Department of Neuroscience, Albert Einstein College of Medicine, Bronx, NY, U.S.A, ²Department of Psychology, Zhejiang Normal University, Jinhua, P.R.C, ³Key Laboratory of Intelligent Education Technology and Application of Zhejiang Province, Zhejiang Normal University, Jinhua, P.R.C, ⁴Department of Psychology, University of Pennsylvania, Philadelphia PA, U.S.A

Development: Disorders

Talk Session: Monday, May 22, 2023, 10:45 am – 12:15 pm EDT, Talk Room 1

Moderator: Shlomit Ben-Ami, MIT

Talk 1, 10:45 am, 42.11

Developmental changes in occipital alpha rhythms: Recording EEG during public engagement events

Gemma Learmonth¹ (gemma.learmonth@glasgow.ac.uk), Christopher Turner¹, Satu Baylan¹, Martina Bracco², Gabriela Cruz¹, Simon Hanzal¹, Marine Keime¹, Isaac Kuye¹, Deborah McNeill¹, Zika Ng¹, Mircea van der Plas¹, Manuela Ruzzoli³, Jelena Trajkovic¹, Domenica Veniero⁴, Sarah Wale¹, Sarah Whear¹, Gregor Thut¹; ¹University of Glasgow, Scotland, ²Hôpital de la Pitié Salpêtrière, Paris, France, ³Basque Center on Cognition Brain and Language (BCBL), Donostia/San Sebastian, Spain, ⁴University of Nottingham, UK

Talk 2, 11:00 am, 42.12

Reliable and predictive non-perceptual representations in primary visual cortex during attempts at visual imagery in aphantasia

Xinyu Zhang¹, Shuai Chang¹, Joel Pearson², Ming Meng¹; ¹South China Normal University, ²The University of New South Wales

Talk 3, 11:15 am, 42.13

Responses to non-linguistic auditory transients in the medial geniculate nucleus are diagnostic for dyslexia in individual subjects

Keith Schneider¹ (keithas@udel.edu), Qianli Meng²; ¹University of Delaware

Talk 4, 11:30 am, 42.14

The impact of cerebral visual impairment on school related competences in

elementary school children

Sara Monteiro¹ (sara.monteiro@uni.lu), Géraldine Hipp², Pascale Esch¹, Sonja Ugen¹; ¹Luxembourg Centre for Educational Testing, University of Luxembourg, ²Centre pour le Développement des Compétences relatives à la Vue, MENJE

Talk 5, 11:45 am, 42.15

Development of biological motion perception: Insights from late-sighted children

Shlomit Ben-Ami^{1,2} (shlomit@mit.edu), Chetan Ralekar¹, Dhun Verma³, Kashish Tiwari³, Mrinalini Yadav³, Priti Gupta^{3,4}, Pragya Shah³, Suma Ganesh⁵, Nikolaus F. Troje⁶, Pawan Sinha¹; ¹MIT Department of Brain and Cognitive Sciences, Cambridge, MA, USA, ²Sagol School of Neuroscience, School of Psychological Sciences, Tel-Aviv University, Tel-Aviv, Israel, ³The Project Prakash Center, Delhi, India, ⁴Amarnath and Shashi Khosla School of Information Technology, Indian Institute of Technology, Delhi, India, ⁵Department of Ophthalmology, Dr. Shroff's Charity Eye Hospital, Delhi, India, ⁶York University, Toronto, Canada

Talk 6, 12:00 pm, 42.16

Reduced perception-action dissociation in children with amblyopia

Zoha Ahmad¹ (zohahmad@my.yorku.ca), Krista Kelly², Erez Freud¹; ¹York University, ²Retina Foundation of the Southwest

3D: Disparity and shape

Talk Session: Monday, May 22, 2023, 10:45 am – 12:15 pm EDT, Talk Room 2

Moderator: Fulvio Domini, Brown University

Talk 1, 10:45 am, 42.21

Warping a disparity field: cooperation between shading and disparity for sparsely defined surfaces

Celine Aubuchon¹ (celine.d.aubuchon@gmail.com), Jovan Kemp¹, Fulvio Domini¹; ¹Brown University

Talk 2, 11:00 am, 42.22

Disparity modulations from both fixational vergence and version contribute to stereopsis

Yuanhao H. Li¹ (yli162@u.rochester.edu), Janis Intoy¹, Jonathan D. Victor², Michele Rucci¹; ¹University of Rochester, ²Weill Cornell Medical College

Talk 3, 11:15 am, 42.23

Stereoscopic slant contrast revisited

Clara Wang¹ (clara.wang@mail.mcgill.ca), Yoel Yakobi¹, Frederick Kingdom¹; ¹McGill University

Talk 4, 11:30 am, 42.24

Cardinal viewpoints of 3D objects predicted by 2D optical flow model

Emma E.M. Stewart¹ (emma.e.m.stewart@gmail.com), Roland W. Fleming^{1,3}, Alexander C. Schütz^{2,3}; ¹Justus-Liebig University Giessen, Germany, ²University of Marburg, Germany, ³Center for Mind, Brain and Behavior,

Universities of Marburg and Giessen, Germany

Talk 5, 11:45 am, 42.25

Humans and 3D neural field models make similar 3D shape judgements

Thomas OConnell¹ (tpo@mit.edu), Tyler Bonnen², Yoni Friedman¹, Ayush Tewari¹, Josh Tenenbaum¹, Vincent Sitzmann¹, Nancy Kanwisher¹; ¹MIT, ²Stanford University

Talk 6, 12:00 pm, 42.26

SimpleXR: An open-source Unity toolbox for simplifying vision research using augmented and virtual reality

Justin Kasowski¹, Michael Beyeler¹; ¹University of California, Santa Barbara

Plasticity and Learning 2

Talk Session: Tuesday, May 23, 2023, 8:15 – 9:45 am EDT, Talk Room 1

Moderator: Biyu He, NYU

Talk 1, 8:15 am, 51.11

Mapping the invariance properties of perceptual priors in one-shot perceptual learning

Ayaka Hachisuka¹ (ah5385@nyu.edu), Jonathan D. Shor¹, Xujin C. Liu², Eric K. Oermann³, Biyu J. He¹; ¹New York University Grossman School of Medicine, ²New York University Tandon school of engineering, ³New York University Langone Health

Talk 2, 8:30 am, 51.12

Masking that disrupts late phases of visual processing eliminates location specificity of visual perceptual learning

Yusuke Nakashima¹ (yusuke_nakashima@brown.edu), Yuka Sasaki¹, Takeo Watanabe¹; ¹Brown University

Talk 3, 8:45 am, 51.13

Alterations in Orientation-Selective Early Visual Neural Functions Are Associated With Reduced Orientation-Dependent Surround Suppression In Schizophrenia

Samuel Klein¹ (klei0742@umn.edu), Collin Teich¹, Eric Rawls¹, Cheryl A. Olman¹, Scott R. Sponheim^{1,2}; ¹University of Minnesota-Twin Cities, Departments of Psychology and Psychiatry, ²Minneapolis Veterans Affairs Medical Center

Talk 4, 9:00 am, 51.14

Comparing retinotopic maps of children and adults reveals a late-stage change in how V1 samples the visual field

Marc Himmelberg¹, Ekin Tünçok¹, Jesse Gomez², Kalanit Grill-Spector³, Marisa Carrasco¹, Jonathan Winawer¹; ¹New York University, ²Princeton University, ³Stanford University

Talk 5, 9:15 am, 51.15

A neural network model of category-learning induced transfer of visual perceptual learning

Luke Rosedahl¹, Thomas Serre¹, Takeo Watanabe¹; ¹Brown University

Talk 6, 9:30 am, 51.16

Feature Representation Covaries With Practice Effects Around The Visual Field

David Tu¹ (dvid.tu@gmail.com), Shutian Xue¹, Marisa Carrasco¹; ¹NYU

Binocular Vision

Talk Session: Tuesday, May 23, 2023, 8:15 – 9:45 am EDT, Talk Room 2

Moderator: Johannes Burge, University of Pennsylvania

Talk 1, 8:15 am, 51.21

Vergence anomalies are associated with impaired stereopsis in the central visual field

Aidan Gauper¹ (gauper@berkeley.edu), Suzanne McKee¹, Dennis Levi², Preeti Verghese¹; ¹Smith-Kettlewell Eye Research Institute, ²UC Berkeley

Talk 2, 8:30 am, 51.22

Retinal eccentricity strongly modulates how interocular delays are impacted by image differences

Callista Dyer¹, Johannes Burge^{1,2,3}; ¹University of Pennsylvania, ²Neuroscience Graduate Group, University of Pennsylvania, ³Bioengineering Graduate Group, University of Pennsylvania

Talk 3, 8:45 am, 51.23

Does contrast adaptation influence the Pulfrich phenomenon?

Aymen Sahal¹, Alexandre Reynaud¹, Robert Hess²; ¹Department of Ophthalmology and Visual Sciences, McGill University, ²McGill Vision Research Unit

Talk 4, 9:00 am, 51.24

Coarse-to-fine interaction on perceived depth in compound grating

Pei-Yin Chen¹ (d02227102@ntu.edu.tw), Chien-Chung Chen^{1,2}, Shin'ya Nishida^{3,4}; ¹Department of Psychology, National Taiwan University, ²Center for Neurobiology and Cognitive Science, National Taiwan University, Taipei, Taiwan, ³Department of Intelligence Science and Technology, Graduate School of Informatics, Kyoto University, ⁴NTT Communication Science Laboratories, Nippon Telegraph and Telephone Corporation

Talk 5, 9:15 am, 51.25

MEG Reveals Distinct Dorsal and Ventral Streams for Binocular Rivalry Dominance and Suppression

Janine Mendola¹ (janine.mendola@mcgill.ca), Elizabeth Bock², Jeremy Fesi¹, Jason Da Silve Castenheira², Sylvain Baillet²; ¹Department of Ophthalmology and Vision Sciences, McGill University, Montreal, QC H9G 1A4, ²Department of Neurology and Neurosurgery and the McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University

Talk 6, 9:30 am, 51.26

Population models of binocular disparity tuning predict the direction of perceived

depth in correlated and anticorrelated random dot stereograms

Paul Hibbard¹ (phibbard@essex.ac.uk), Jordi Asher¹; ¹University of Essex

Visual Memory: Space, time, features, objects

Talk Session: Tuesday, May 23, 2023, 10:45 am – 12:30 pm EDT, Talk Room 1

Moderator: Brian Scholl, Yale University

Talk 1, 10:45 am, 52.11

A signal-detection model evaluates feature dependence in visual long-term memory for real-world objects

Igor Utochkin¹ (iutochkin@uchicago.edu), Daniil Grigorev²; ¹University of Chicago, ²HSE University

Talk 2, 11:00 am, 52.12

Deriving the Representational Space and Memorability of Object Concepts and Features

Meng-Chien Lee¹ (mlee26@uchicago.edu), Marc G. Berman¹, Wilma A. Bainbridge¹, Andrew J. Stier¹; ¹University of Chicago

Talk 3, 11:15 am, 52.13

Individual preferences for space or time in visual working memory are related to spatial and temporal abilities and persist over months

Anna Heuer¹ (anna.heuer@hu-berlin.de), Martin Rolfs¹; ¹Department of Psychology, Humboldt-Universität zu Berlin, Germany

Talk 4, 11:30 am, 52.14

Micro-timing of iconic memory readout

Karla Matic^{1,2,3}, Issam Tafech^{1,3}, John-Dylan Haynes^{1,2,3,4,5}; ¹Charité—Universitätsmedizin Berlin, ²Max Planck School of Cognition, ³Humboldt-Universität zu Berlin, ⁴German Center for Neurodegenerative Diseases, ⁵Technische Universität Dresden

Talk 5, 11:45 am, 52.15

The “unfinishedness” of dynamic events is spontaneously extracted in visual processing: A new “Visual Zeigarnik Effect”

Joan Danielle K. Ongchoco¹ (joan.ongchoco@yale.edu), Kimberly W. Wong¹, Brian Scholl¹; ¹Yale University

Talk 6, 12:00 pm, 52.16

Lingering distractor representations bias memory reports

Ziyao Zhang¹ (ziyaopsy@gmail.com), Jarrod A. Lewis-Peacock¹; ¹The University of Texas at Austin

Talk 7, 12:15 pm, 52.17

It's a match! Visual template matching enhances concurrent task processing

Yi Ni Toh¹ (tohxx011@umn.edu), Vanessa G. Lee; ¹University of Minnesota Twin-Cities

Object Recognition: Categories, neural mechanisms

Talk Session: Tuesday, May 23, 2023, 10:45 am – 12:30 pm EDT, Talk Room 2

Moderator: Arash Afraz, NIMH/NIH

Talk 1, 10:45 am, 52.21

Preserved visual categorical coding in the ventral occipito-temporal cortex despite transient early blindness and permanent alteration in the functional response of early visual regions

Olivier Collignon¹, Mohamed Rezk², Xiaoqing Gao³, Junghyun Nam⁴, Zhong-Xu Liu⁵, Terri Lewis⁶, Daphne Maurer⁷, Stefania Mattioni⁸; ¹UCLouvain, ²HES-SO Valais-Wallis, The Sense Innovation and Research Center, ³Zhejiang University, China, ⁴University of Toronto, ⁵McMaster University, ⁶Ghent University

Talk 2, 11:00 am, 52.22

Perceptography: Revealing the causal contribution of the inferior temporal cortex to visual perception.

Elia Shahbazi¹ (elia.shahbazi@nih.gov), Timothy Ma², Arash Afraz¹; ¹National Institutes of Health, ²Center for Neural Science, New York University

Talk 3, 11:15 am, 52.23

Both mOTS-words and pOTS-words prefer emoji stimuli over text stimuli during a reading task

Alexia Dalski^{1,2} (alexia.dalski@uni-marburg.de), Holly Kular³, Julia G. Jorgensen³, Kalanit Grill-Spector^{3,4}, Mareike Grotheer^{1,2}; ¹Department of Psychology, Philipps-Universität Marburg Germany, ²Center for Mind, Brain and Behavior – CMBB, Philipps-Universität Marburg and Justus-Liebig-Universität Giessen, Germany, ³Department of Psychology, Stanford University, USA, ⁴Wu Tsai Neurosciences Institute, Stanford University, USA

Talk 4, 11:30 am, 52.24

Objects, faces, and spaces

Heida Maria SIGURDARDOTTIR^{1,3} (heidasi@hi.is), Inga María Ólafsdóttir^{2,3}; ¹University of Iceland, ²Reykjavik University, ³Icelandic Vision Lab

Talk 5, 11:45 am, 52.25

THINGS-drawings: A large-scale dataset containing human sketches of 1,854 object concepts

Judith E. Fan¹ (judithfan@gmail.com), Kushin Mukherjee², Holly Huey¹, Martin N. Hebart^{3,4}, Wilma A. Bainbridge⁵; ¹University of California, San Diego, ²University of Wisconsin-Madison, ³Justus Liebig University, Giessen, Germany, ⁴Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, ⁵University of Chicago

Talk 6, 12:00 pm, 52.26

Uncovering neural-based visual-orthographic representations from mental imagery

Shouyu Ling^{1,2} (shouyu.ling@mail.utoronto.ca), Lorna García Pentón³, Blair C. Armstrong^{1,3}, Andy C.H. Lee^{1,4},

Adrian Nestor¹; ¹Department of Psychology at Scarborough, University of Toronto, Toronto, Ontario, Canada, ²Department of Ophthalmology, University of Pittsburgh, Pittsburgh, PA, US, ³MRC Cognition & Brain Sciences Unit, University of Cambridge, Cambridge, UK, ⁴BCBL. Basque Center on Cognition, Brain, and Language, San Sebastián, Spain, ⁵Rotman Research Institute, Baycrest Centre, Toronto, Ontario, Canada

Talk 7, 12:15 pm, 52.27

Putative excitatory and inhibitory neurons in the macaque inferior temporal cortex play distinct roles in core object recognition

Sachi Sanghavi¹, Kohitij Kar²; ¹University of Wisconsin–Madison, ²York University

Eye Movements: Neural processes and models

Talk Session: Tuesday, May 23, 2023, 2:30 – 4:15 pm EDT, Talk Room 1

Moderator: Robert McPeck, SUNY

Talk 1, 2:30 pm, 54.11

Object-based saccadic enhancement of superior colliculus activity

Christopher Conroy¹ (cconroy@sunyopt.edu), Hossein Adeli², Abe Leite², Gregory J. Zelinsky², Robert M. McPeck¹; ¹SUNY College of Optometry, ²Stony Brook University

Talk 2, 2:45 pm, 54.12

Relating trial-to-trial variability in superior colliculus visual responses to saccadic reaction time variability

Carlotta Trottenberg¹ (c.trottenberg@gmail.com), Ziad Hafed¹; ¹University of Tübingen

Talk 3, 3:00 pm, 54.13

Neural subpopulations in marmoset area MTC but not MT show extra-retinal tuning for saccade direction

Amy Bucklaew¹ (amy_bucklaew@urmc.rochester.edu), Shanna Coop², Jude Mitchell^{1,2}; ¹Neuroscience Graduate Program, University of Rochester, ²Brain and Cognitive Sciences, University of Rochester

Talk 4, 3:15 pm, 54.14

Visual landmark information is multiplexed with target information in the visual responses of prefrontal gaze centres.

Vishal Bharmuria¹ (bhav2501@yorku.ca), Adrian Schütz², Xiaogang Yan¹, Hongying Wang¹, Frank Bremmer², John Douglas Crawford¹; ¹Centre for Vision Research (CVR) and Vision: Science to Applications (VISTA), York University, ²Department of Neurophysics, Phillips Universität Marburg and Center for Mind, Brain and Behavior – CMBB, Philipps-Universität Marburg and Justus-Liebig-Universität Giessen

Talk 5, 3:30 pm, 54.15

One Preferred Retinal Locus to rule them all: A fine dissection of the PRL in space and time

Josselin Gautier^{1,2} (josselingautier@gmail.com), Norick R. Bowers^{2,3}, Martin S. Banks², Austin Roorda²; ¹CHNO des Quinze-Vingts, Inserm-DGOS CIC 1423, F-75012 Paris, ²Herbert Wertheim School of Optometry and Vision

Science, University of California Berkeley, ³Justus-Liebig-Universität Gießen, Germany

Talk 6, 3:45 pm, 54.16

Sinusoidal Smooth Pursuit After Childhood Hemispherectomy

Maria Z. Chroneos^{1,2} (mzchrone@andrew.cmu.edu), Shawn M. Willet², Sophia Robert¹, J. Patrick Mayo², Marlene Behrmann^{2,1}; ¹Carnegie Mellon University, ²University of Pittsburgh

Talk 7, 4:00 pm, 54.17

The eyes as a window to internal fluctuations in global brain state

Richard Johnston^{1,2,3} (richardjohnston@cmu.edu), Matthew A. Smith^{1,2,3}; ¹Department of Biomedical Engineering, Carnegie Mellon University, Pittsburgh, USA, ²Carnegie Mellon Neuroscience Institute, Carnegie Mellon University, Pittsburgh, USA, ³Center for the Neural Basis of Cognition, Carnegie Mellon University, Pittsburgh, USA

Scene Perception

Talk Session: Tuesday, May 23, 2023, 2:30 – 4:15 pm EDT, Talk Room 2

Moderator: Dirk B. Walther, University of Toronto

Talk 1, 2:30 pm, 54.21

Feedback processing shapes the categorical organization of the ventral stream

Yuanfang Zhao¹, Simen Hagen¹, Marius Peelen¹; ¹Donders Institute for Brain, Cognition and Behavior

Talk 2, 2:45 pm, 54.22

The occipital place area (OPA) supports walking in 8-year-olds, not 5-year-olds

Yaelan Jung¹ (jung.yaelan@gmail.com), Daniel D. Dilks; ¹Emory University

Talk 3, 3:00 pm, 54.23

Biased population coding of visual orientation in the human brain

William J. Harrison¹ (willjharri@gmail.com), Paul M. Bays², Reuben Rideaux¹; ¹The University of Queensland, ²University of Cambridge

Talk 4, 3:15 pm, 54.24

Distinct early and late neural mechanisms regulate feature-specific sensory adaptation in the human visual system

Reuben Rideaux¹ (reuben.rideaux@gmail.com), Rebecca K West², Dragan Rangelov¹, Jason B Mettingley^{1,2}; ¹Queensland Brain Institute, University of Queensland, ²School of Psychology, University of Queensland

Talk 5, 3:30 pm, 54.25

Making memorability of scenes better or worse by manipulating their contour properties

Seohee Han¹ (seohee.han@mail.utoronto.ca), Morteza Rezanejad¹, Dirk B. Walther¹; ¹University of Toronto

Talk 6, 3:45 pm, 54.26

Object-based attention during scene perception elicits boundary contraction in memory

Elizabeth H. Hall^{1,2} (ehhall@ucdavis.edu), Joy J. Geng^{1,2}; ¹University of California, Davis, ²Center for Mind and Brain

Talk 7, 4:00 pm, 54.27

A retinotopic reference frame structures communication between visual and memory systems

Adam Steel¹ (adamdanielsteel@gmail.com), Brenda Garcia¹, Edward Silson², Caroline Robertson¹; ¹Dartmouth College, ²University of Edinburgh

Attention: Models, individual differences, reward, capture, shifting

Talk Session: Tuesday, May 23, 2023, 5:15 – 7:15 pm EDT, Talk Room 1

Moderator: Viola Stoermer, Dartmouth

Talk 1, 5:15 pm, 55.11

Statistical Characterization of Attention Effects on the Contrast Tuning Functions Of Neuronal Populations of a Convolutional Neural Network

Sudhanshu Srivastava¹ (sudhanshu@ucsb.edu), Miguel P. Eckstein¹; ¹University of California, Santa Barbara

Talk 2, 5:30 pm, 55.12

How does cognitive arousal modulate visuocortical contrast response functions?

Sam Ling¹ (samling@bu.edu), Louis Vinke^{1,2}, Joseph McGuire¹, Jasmine Pan¹; ¹Boston University, ²Massachusetts General Hospital

Talk 3, 5:45 pm, 55.13

Spatial suppression transfers across eye position in retinotopic coordinates

Seah Chang¹ (chang.2127@osu.edu), Julie D. Golomb¹; ¹Department of Psychology, The Ohio State University

Talk 4, 6:00 pm, 55.14

Precise Memories and Imprecise Guidance: Why attention is guided towards colors that I'm certain I didn't see

Jamal Williams¹ (jrwilliams@ucsd.edu), Timothy Brady¹, Viola Stoermer²; ¹University of California, San Diego, ²Dartmouth College

Talk 5, 6:15 pm, 55.15

The ins and outs of attention – shifting within and between perception and working memory

Daniela Gresch¹, Sage E.P. Boettcher¹, Freek van Ede², Anna C. Nobre¹; ¹University of Oxford, ²Vrije Universiteit Amsterdam

Talk 6, 6:30 pm, 55.16

A thalamo-cortical blackboard model for coordinating visual mental routines

Daniel Schmid¹ (daniel-1.schmid@uni-ulm.de), Daniel A. Braun¹, Heiko Neumann¹; ¹Institute of Neural Information Processing, Ulm University

Talk 7, 6:45 pm, 55.17

Reward variance outweighs reward value in modulating capture of visual attention

Mike Le Pelley¹ (m.lepelley@unsw.edu.au), Daniel Pearson^{1,2}, Amy Chong¹; ¹University of New South Wales, Sydney, Australia, ²University of Sydney, Australia

Talk 8, 7:00 pm, 55.18

Contextual information triggers attentional selection: a dissociation between semantic priming and response compatibility effects

Mor Sasi¹ (mor.sasi1992@gmail.com), Noa Izhaki¹, Nitzan Micher¹, Dominique Lamy^{1,2}; ¹School of Psychological Sciences, Tel Aviv University, ²Sagol School of Neuroscience, Tel Aviv University

Visual Working Memory

Talk Session: Tuesday, May 23, 2023, 5:15 – 7:15 pm EDT, Talk Room 2

Moderator: David Alais, University of Sydney

Talk 1, 5:15 pm, 55.21

Efficient Measurement of Dynamic Visual Working Memory

Garry Kong¹ (kong.garry@aoni.waseda.jp), Isabelle Frisken², Gwenisha J. Liaw², Robert Keys², David Alais²; ¹Waseda University, ²University of Sydney

Talk 2, 5:30 pm, 55.22

No Evidence for a Visual Testing Effect for Novel, Meaningless Objects

Anna C. McCarter¹ (acmccarter@umass.edu), David E. Huber¹, Rosemary A. Cowell¹; ¹University of Massachusetts at Amherst

Talk 3, 5:45 pm, 55.23

Nature of the memory trace left by the previous trial in an interceptive task

Esaú Sirius Ventura Pupo¹ (esau.sirius@gmail.com), Raymundo Machado de Azevedo Neto², André Mascioli Cravo¹; ¹Federal University of ABC (UFABC), São Paulo, Brazil, ²Brain Institute, Hospital Israelita Albert Einstein, São Paulo, Brazil

Talk 4, 6:00 pm, 55.24

Sequential neuronal spikes as units of cortical coding across visual perception and working memory

Weizhen Xie¹ (weizhen.xie@nih.gov), Kareem Zaghloul; ¹National Institute of Neurological Disorders and Stroke, National Institutes of Health

Talk 5, 6:15 pm, 55.25

Parietal impact on visual working memory representation in occipito-temporal cortex

Yaoda Xu¹ (xucogneuro@gmail.com); ¹Yale University

Talk 6, 6:30 pm, 55.26

Action consequences guide visual working memory use

Andre Sahakian¹ (a.sahakian@uu.nl), Surya Gayet¹, Chris Paffen¹, Stefan Van der Stigchel¹; ¹Utrecht University, the Netherlands

Talk 7, 6:45 pm, 55.27

A model of composing working memories from hierarchical representations acquired through visual learning

Brad Wyble¹ (bwyble@gmail.com), Ryan O'Donnell¹, Shekoo Hedayati¹; ¹Penn State University

Talk 8, 7:00 pm, 55.28

Individual variation in optimal encoding strategy in visual working memory

Yin-ting Lin¹ (lin.3913@osu.edu), Andrew B. Leber¹; ¹The Ohio State University

Perceptual Decision-Making and Confidence

Talk Session: Wednesday, May 24, 2023, 8:15 – 10:00 am EDT, Talk Room 1

Moderator: Doby Rahnev, Georgia Tech

Talk 1, 8:15 am, 61.11

Reward and Response Accuracy Trade-offs in Visuomotor Decisions Under Uncertainty

Jami Pekkanen¹ (jami.pekkanen@helsinki.fi), Tero Hakala², Samuel Tuhkanen¹, Lauri Oksama³, Otto Lappi¹;

¹University of Helsinki, Finland, ²National Defence University, Finland, ³University of Turku, Finland

Talk 2, 8:30 am, 61.12

Expectations and cognitive control modulate history biases in perceptual decisions

Gizay Ceylan¹, David Pascucci¹; ¹EPFL

Talk 3, 8:45 am, 61.13

Beyond the ideal observer: internal states of uncertainty modulate sequential biases in perceptual decisions

Ayberk Ozkırli¹ (ayberk.ozkiri@gmail.com), David Pascucci¹; ¹Laboratory of Psychophysics, Brain Mind Institute, School of Life Sciences, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

Talk 4, 9:00 am, 61.14

Confidence Determines the Strength of Visual Serial Dependence

Geoff Gallagher¹ (gg16048@bristol.ac.uk), Christopher Benton²; ¹University of Bristol

Talk 5, 9:15 am, 61.15

A common computational principle for decision-making with confidence, expectation

and reward

yunxuan zheng¹ (yzheng447@gatech.edu), Kai Xue², Medha Shekhar³, Dobromir Rahnev⁴; ¹School of Psychology, Georgia Institute of Technology, Atlanta, GA, US

Talk 6, 9:30 am, 61.16

Population activity in sensory cortex informs confidence in a perceptual decision

Zoe Boundy-Singer¹ (zoebsinger@utexas.edu), Corey Ziemba¹, Robbe Goris¹; ¹Center for Perceptual Systems, UT Austin

Talk 7, 9:45 am, 61.17

Effects of surrounding sensory evidence on central visual confidence

Alan L. F. Lee¹ (alan.lf.lee@gmail.com), Jenny W. S. Chiu¹, Jocelyn W. K. Lam¹; ¹Lingnan University, Hong Kong

Visual Search

Talk Session: Wednesday, May 24, 2023, 8:15 – 10:00 am EDT, Talk Room 2

Moderator: Monica Castelhana, University British Columbia

Talk 1, 8:15 am, 61.21

Don't hide the instruction manual: A dynamic trade-off between using internal and external templates during visual search

Alex Hoogerbrugge¹, Christoph Strauch¹, Tanja Nijboer¹, Stefan Van der Stigchel¹; ¹Experimental Psychology, Helmholtz Institute, Utrecht University, The Netherlands

Talk 2, 8:30 am, 61.22

Memory Compression Facilitates Search for Multiple Targets

Andrew Clement¹ (andrew.clement@tamu.edu), Brian Anderson¹; ¹Texas A&M University

Talk 3, 8:45 am, 61.23

Looking for details: Fine-grained visual search at foveal scale

Sanjana Kapisthalam¹ (skapisth@ur.rochester.edu), Martina Poletti¹; ¹University of Rochester, ²Center for vision science at University of Rochester

Talk 4, 9:00 am, 61.24

Alpha oscillations in early visual cortex support visual search through inhibition of neuronal excitability to Target and Distractor features

Katharina Duecker¹ (katharina.duecker@gmail.com), Kimron L Shapiro¹, Simon Hanslmary², Jeremy Wolfe^{3,4}, Yali Pan¹, Ole Jensen¹; ¹Centre for Human Brain Health, School of Psychology, University of Birmingham, UK, ²Centre for Cognitive Neuroimaging, School of Neuroscience and Psychology, University of Glasgow, UK, ³Brigham and Women's Hospital, Boston, MA USA, ⁴Harvard Medical School, Boston, Massachusetts, USA

Talk 5, 9:15 am, 61.25

Rank and career level are inadequate measures of perceptual expertise in radiology

Robert G. Alexander¹ (rgalexander.vision@gmail.com), Stephen Waite¹, Shawn Lyo¹, Ashwin Venkatakrishnan¹, Arcadij Grigorian¹, Stephen L. Macknik¹, Susana Martinez-Conde¹; ¹SUNY Downstate Health Sciences University, Brooklyn, NY, USA

Talk 6, 9:30 am, 61.26

Expectations Versus Reality: The Effect of Semantic Knowledge on Statistical Learning

Laura Sikun Li¹ (20sl101@queensu.ca), Hannah Lum Smith¹, Karolina Krzyś¹, Carrick C. Williams², Monica S. Castelhana¹; ¹Queen's University, ²California State University San Marcos

Talk 7, 9:45 am, 61.27

Stop pretending your trials are independent: Learn more from your data with asymptotic regression

Alasdair Clarke¹ (a.clarke@essex.ac.uk), Amelia Hunt²; ¹Department of Psychology, University of Essex, ²School of Psychology, University of Aberdeen

Attention: Spatial, featural, temporal, divided

Talk Session: Wednesday, May 24, 2023, 10:45 am – 12:30 pm EDT, Talk Room 1

Moderator: Alex White, Barnard College

Talk 1, 10:45 am, 62.11

Spatial attention effects dominate over temporal attention

Helena Palmieri¹ (hp808@nyu.edu), Marisa Carrasco^{1,2}; ¹Department of Psychology, New York University, New York, NY, 10003, USA, ²Center for Neural Science, New York University, New York, NY, 10003, USA

Talk 2, 11:00 am, 62.12

Expectation modulates the reflexive allocation of covert spatial attention

Michael Grubb¹ (michael.grubb@trincoll.edu), Nick Crotty¹, Nicole Massa¹, Dagoberto Tellez¹, Alex White²; ¹Trinity College, ²Barnard College

Talk 3, 11:15 am, 62.13

Feature-based attention has a spatial gradient

Nika Adamian¹ (nika.adamyan@gmail.com), Søren Krogh Andersen^{1,2}; ¹University of Aberdeen, ²University of Southern Denmark

Talk 4, 11:30 am, 62.14

Attraction of population receptive fields is determined by precision of attention

Sumiya A. Sheikh Abdirashid^{1,2,3} (s.abdirashid@spinozacentre.nl), Tomas Knapen^{1,2,3}, Serge O. Dumoulin^{1,2,3,4}; ¹Spinoza Centre for Neuroimaging, Amsterdam, Netherlands, ²Netherlands Institute for Neuroscience, Amsterdam, Netherlands, ³Experimental and Applied Psychology, Vrije Universiteit, Amsterdam, Netherlands, ⁴Experimental Psychology, Helmholtz Institute, Utrecht University, Utrecht, Netherlands

Talk 5, 11:45 am, 62.15

Dissociable neuronal substrates of visual feature attention and working memory in the primate brain

Diego Mendoza-Halliday¹ (diegomendoz@yahoo.com), Haoran Xu¹, Robert Desimone¹; ¹Massachusetts Institute of Technology

Talk 6, 12:00 pm, 62.16

Simultaneous changes in acetylcholine (ACh) levels and neural activity during goal-directed behavior in non-human primates.

Fabian Munoz Silva^{1,2} (fm2481@columbia.edu), Maria Bompolaki^{3,4}, Alex Dranovsky^{3,4}, Vincent Ferrera^{1,2};

¹Department of Neuroscience, Columbia University, ²Zuckerman Mind Brain Behavior Institute, Columbia University, ³Department of Psychiatry, Columbia University, ⁴New York State Psychiatric Institute, New York

Talk 7, 12:15 pm, 62.17

The attentionally-modulated posterior parietal area V6A in macaques and humans

Patrizia Fattori¹ (patrizia.fattori@unibo.it), Marina De Vitis¹, Matteo Filippini¹, Kostas Hadjidimitrakis¹, Claudio Galletti¹; ¹University of Bologna, Italy

Face Perception: Neural mechanisms and models

Talk Session: Wednesday, May 24, 2023, 10:45 am – 12:30 pm EDT, Talk Room 2

Moderator: Richard Krauzlis, NIH

Talk 1, 10:45 am, 62.21

Reconstructing the neurodynamics of face perception during real world vision in humans using intracranial EEG recordings

Arish Alreja¹ (aalreja@andrew.cmu.edu), Michael J. Ward², Jhair A. Colan³, Qianli Ma¹, R. Mark Richardson⁴, Louis-Phillipe Morency¹, Avniel S. Ghuman³; ¹Carnegie Mellon University, ²University of California, Los Angeles, ³University of Pittsburgh, ⁴Harvard University and Massachusetts General Hospital

Talk 2, 11:00 am, 62.22

Rapid face preference during visual object processing by the primate superior colliculus

Gongchen Yu¹ (yugongchen1990@gmail.com), Leor Katz¹, Christian Quaia¹, Adam Messinger¹, Richard Krauzlis¹; ¹Laboratory of Sensorimotor Research, National Eye Institute, NIH

Talk 3, 11:15 am, 62.23

Comparing iEEG responses and deep networks with Bayesian statistics challenges the view that lateral face-selective regions are specialized for facial expression recognition over identity recognition

Emily Schwartz¹ (schwarex@bc.edu), Arish Alreja^{2,3,4}, R. Mark Richardson^{5,6}, Avniel Ghuman^{3,4}, Stefano Anzellotti¹; ¹Boston College, ²Carnegie Mellon University, ³University of Pittsburgh, ⁴University of Pittsburgh Medical Center, ⁵Massachusetts General Hospital, ⁶Harvard Medical School

Talk 4, 11:30 am, 62.24

Reversed contributions of visual and semantic information to the representations of familiar faces in perception and memory

Adva Shoham¹ (advashoham@mail.tau.ac.il), Idan Daniel Grosbard¹, Yuval Navon¹, Galit Yovel¹; ¹Tel Aviv University

Talk 5, 11:45 am, 62.25

A NARROW BAND OF IMAGE DIMENSIONS IS CRITICAL FOR THE LEARNING AND RECOGNITION OF FACE IDENTITY

Dan Rogers¹ (dr737@york.ac.uk), Tim Andrews¹, Mila Mileva²; ¹The University of York, ²The University of Plymouth

Talk 6, 12:00 pm, 62.26

A familiar face and person processing area in the human temporal pole

Ben Deen^{1,2} (benjamin.deen@gmail.com), Winrich A Freiwald¹; ¹Rockefeller University, ²Tulane University

Talk 7, 12:15 pm, 62.27

Thinking outside of the face network: face recognition deficits are related to reduced connectivity between high-level face areas and non-face-selective sensory, memory, and social processing regions

Alison Campbell^{1,2} (alison.candice.campbell@gmail.com), Xian Li³, Michael Esterman^{1,2,4}, Joseph DeGutis^{1,5};
¹Boston Attention and Learning Laboratory, VA Boston Healthcare System, Boston, MA, ²Department of Psychiatry, Boston University School of Medicine, Boston MA, ³Department of Psychological and Brain Sciences, Johns Hopkins University, Baltimore, MD, ⁴National Center for PTSD, VA Boston Healthcare System, Boston, MA, ⁵Department of Psychiatry, Harvard Medical School, Boston MA

Poster Sessions

Saturday Morning Posters, May 20, 8:30 am

Plasticity and Learning: Clinical applications
Binocular Vision: Clinical
Spatial Vision: Perceptual properties in health and disease
Attention: Temporal, divided
Attention: Endogenous, exogenous
Visual Search: Features, models, neural
Aging

Pavilion

Motion: Models, neural mechanisms
Temporal Processing: Duration, timing perception
Perception & Action: Reaching, aiming, interception
Perception and Action: Navigation and flow in virtual environments
Multisensory Processing: Visuo-haptic
Visual Memory: Long term memory

Saturday Afternoon Posters, May 20, 2:45 pm

Color, Light and Materials: Lightness, brightness
Color, Light and Materials: Cognition
Attention: Top-down, reward
Face Perception: Individual differences
Face Perception: Emotion
Undergraduate Just-In-Time 1

Pavilion

Attention: Affect, threat
Eye Movements: Perception, remapping
Object Recognition: Reading
Binocular Vision: Disparity processing
3D: Cues and integration
Perception and Action
Spatial Vision: Crowding and eccentricity

Sunday Morning Posters, May 21, 8:30 am

Attention: Spatial
Face Perception: Experience, learning, and expertise
Visual Search: Eye movements, attention, individual differences
Attention: Cueing, inattention
Attention: Objects

Pavilion

Perceptual Decision-Making
Color, Light and Materials: Surfaces, materials, constancy
Object Recognition: Neural organization and representations
Object Recognition: Visual preference, features and objects
Eye Movements: Saccades and pursuit
Spatial Vision: Neural mechanisms

Sunday Afternoon Posters, May 21, 2:45 pm

Development: Neural mechanisms and eye movements
Eye Movements: Visual Impairment
Motion: Local, in depth
Attention: Individual differences
Visual Working Memory: Interference
Visual Working Memory: Attention, load and capacity
Perceptual Decision-Making: Confidence

Pavilion

Plasticity and Learning: Statistical learning
Plasticity and Learning: Tasks, models
Binocular Vision: Integration and rivalry
3D: Shape
Perception and Action: Navigation and flow
Face Perception: Insights from artificial neural networks
Perceptual Organization: Shape, figure/ground, occlusion

Monday Morning Posters, May 22, 8:30 am

Object Recognition: Models
Scene Perception: Spatiotemporal factors
Attention: Temporal, templates, memory
Attention: Features
Image Preference, Statistics and Aesthetics
Undergraduate Just-In-Time 2

Pavilion

Eye Movements: Individual differences, novel measurement
Visual Working Memory: Serial dependence
Visual Working Memory: Neural mechanisms
Visual Working Memory: Space, features, objects
Multisensory Processing: Audio-visual, visuo-vestibular

Tuesday Morning Posters, May 23, 8:30 am

Color, Light, and Materials: Neural mechanisms, models
Perceptual Organization: Segmentation, grouping, similarity
Face Perception: Models
Face Perception: Neural mechanisms
Scene Perception: Categorization, memory, cognition
Scene Perception: Neural mechanisms
Visual Search: Scenes and other natural environments

Pavilion

Development: Perception and cognition
Spatial Vision: Models and image statistics
Motion: Higher-order
Attention: Bottom-up
Eye Movements: Complex tasks
Visual Memory: Buildup, imagery, ensembles

Tuesday Afternoon Posters, May 23, 2:45 pm

Plasticity and Learning: Cortex
Plasticity and Learning: Sensorimotor
Perception & Action: Grasping
3D: Spatial layout and VR/AR
Eye Movements: Scenes, VR, 3D
Motion: Optic flow
Perceptual Organization: Contour integration, common fate

Pavilion

Object Recognition: Categories
Object Recognition: Neural mechanisms
Face Perception: Wholes, parts, configurations, and features
Face Perception: Development and disorders
Face Perception: Social cognition

Wednesday Morning Posters, May 24, 8:30 am

Temporal Processing: Neural mechanisms and models
Object Recognition: Features and parts
Visual Memory: Capacity, encoding, retrieval
Spatial Vision: Texture
Visual Search: Attention
Visual Search: Strategies, efficiencies

Pavilion

Perception and Action: Perception of Human Actions and Bodies
Eye Movements: Fixation
Eye Movements: Attention, cognition, neural processes
Perceptual Organization: Symmetry, preference, ensembles
Scene Perception: Natural image statistics
Scene Perception: Models
Scene Perception: Virtual environments

Saturday Morning Posters in Banyan Breezeway

Plasticity and Learning: Clinical applications

23.301 Reading styles modulate perceptual roles of the hands in bimanual braille reading

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Santani Teng¹, Manfred Mackeben¹; ¹Smith-Kettlewell Eye Research Institute

23.302 Preserved blind-field visual abilities are most prevalent very early after stroke-induced V1 damage

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Berkeley Fahrenthold¹ (berkeley_fahrenthold@urmc.rochester.edu), Matthew Cavanaugh¹, Jingyi Yang¹, Bryan Redmond¹, Krystel Huxlin¹; ¹University of Rochester

23.303 Neural and behavioral correlates of evidence accumulation in human click-based echolocation

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Haydee Garcia-Lazaro¹ (haydee@ski.org), Santani Teng¹; ¹The Smith-Kettlewell Eye Research Institute

23.304 The Impact of Vision Restoration on Visual Cortical Structure

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Noelle Stiles¹ (nstiles@usc.edu), Jeiran Choupan², Hossein Ameri¹, Vivek Patel³, Yonggang Shi²; ¹Department of Ophthalmology, University of Southern California, 1450 San Pablo Street, Los Angeles, CA, 90033, USA, ²Stevens Neuroimaging and Informatics Institute, University of Southern California, 2025 Zonal Avenue, Los Angeles, CA, 90033, USA, ³Department of Ophthalmology, University of California, Irvine, 850 Health Sciences Road, Irvine, CA, 92697, USA

23.305 Functional and structural adaptations to lifelong lack of cone input and its implications for gene therapy outcomes

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Roni Maimon-Mor^{1,2} (r.maimon@ucl.ac.uk), Mahtab Farahbakhsh^{1,2}, Elaine Anderson^{1,3,4}, Andy Rider¹, John Greenwood², Mohamed Katta^{1,5}, Pete Jones^{1,6}, Samuel Schwarzkopf^{2,7}, Geraint Rees^{3,4}, Michel Michaelides^{1,5}, Tessa Dekker^{1,2}; ¹UCL Institute of Ophthalmology, University College London, London EC1V 9EL, UK, ²Experimental Psychology, University College London, London WC1H 0AP, UK, ³UCL Institute of Cognitive Neuroscience, University College London, London WC1N 3AZ, UK, ⁴The Wellcome Centre for Human Neuroimaging, University College London, London WC1N 3AR, UK, ⁵Moorfields Eye Hospital, London EC1V 2PD, UK, ⁶Division of Optometry and Visual Sciences; School of Health Sciences; City, University of London, London EC1V 0HB, UK, ⁷School of Optometry and Vision Science, University of Auckland, Auckland 1023, New Zealand

23.306 Training perceptual-cognitive abilities improves simulated driving performance

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jesse Michaels¹ (jesse.michaels@umontreal.ca), Romain Chaumillon¹, Sergio Mejia-Romero¹, Delphine Bernardin^{1,2,3}, Jocelyn Faubert¹; ¹Faubert Laboratory, School of Optometry, Université de Montréal, Montréal, Quebec, Canada, ²Essilor International, Research and Development Department, Paris, France, ³Essilor Canada, Saint-Laurent, Canada

23.307 Mesopic reading is further exacerbated by glaucomatous damage

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Traci-Lin Goddin¹, David Friedman², Cynthia Owsley³, MiYoung Kwon¹; ¹Department of Psychology, Northeastern University, Boston, MA, ²Massachusetts Eye and Ear, Harvard Medical School, Boston, MA, ³Department of Ophthalmology and Visual Sciences, University of Alabama at Birmingham, Birmingham, AL

23.308 Evaluating the performance of Bayesian adaptive qReading in low vision

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Deyue Yu¹ (deyueyu@gmail.com), Zhong-Lin Lu^{2,3}; ¹Ohio State University, ²NYU Shanghai, ³New York University, New York

23.309 Personalized Spatial Remapping of Text Improves Word Reading in the Presence of Simulated Central Field Loss

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Colin S. Flowers¹ (flowe186@umn.edu), Arda Fidanci¹, Chasity Foster², Gordon E. Legge¹, Stephen Engel¹; ¹University of Minnesota Twin Cities, ²Iowa State University

23.310 Visual snow is affected by contrast adaptation

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Samantha Montoya¹ (monto112@umn.edu), Carter Mulder¹, Michael Lee¹, Michael-Paul Schallmo¹, Stephen Engel¹; ¹University of Minnesota

23.312 The Impact of Sub-Foveal Scotomas on Visual Perception and Fine Oculomotor Behavior

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ashley M. Clark¹ (aclark43@ur.rochester.edu), Benjamin Moon¹, Samantha K. Jenks¹, Sanjana Kapisthala¹, Martina Poletti¹; ¹University of Rochester

Binocular Vision: Clinical

23.313 Behavioral and EEG Measures of Binocular Rivalry in People with Schizophrenia

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kamar S. Abdullahi¹ (abdul447@umn.edu), Samantha A. Montoya¹, Kyle W. Killebrew¹, Hannah R. Moser¹, Scott R. Sponheim^{1,2}, Michael-Paul Schallmo¹; ¹University of Minnesota, ²Minneapolis VA Medical Center

23.314 Glaucomatous neurodegeneration spares the cortical mechanism underlying binocular disparity integration across the visual field

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Guido Maiello¹ (guido_maiello@yahoo.it), MiYoung Kwon²; ¹Justus Liebig University Giessen, ²Northeastern University

23.315 Evaluation of motion perception and binocular vision following dichoptic treatment for amblyopia

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Akosua K. Asare¹, Cindy Ho², Hee Yeon Im¹, Deborah Giaschi¹; ¹University of British Columbia, Vancouver, Canada, ²Mount Pleasant Optometry Centre, Vancouver, Canada

23.316 Testing the effect of dichoptic surround masking in amblyopic vision

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Rinku Sarkar¹, Frederick A.A. Kingdom¹, Alexandre Reynaud¹; ¹Department of Ophthalmology & Visual Sciences, McGill University

23.317 Contrast sensitivity channels in amblyopia: a meta-factor-analysis

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Alexandre Reynaud¹ (alexandre.reynaud@mail.mcgill.ca), Seung Hyun Min²; ¹Department of Ophthalmology and Visual Sciences, McGill University, Montreal, Canada, ²School of Ophthalmology and Optometry, Affiliated Eye Hospital, State Key Laboratory of Ophthalmology, Optometry and Vision Science, Wenzhou Medical University, Wenzhou, China

23.318 Nonparametric Bayesian Estimation of Contrast Sensitivity Functions

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Dennis Barbour¹ (dbarbour@wustl.edu), Dom Marticorena¹, Shohaib Shaffiey¹, Quinn Wai Wong¹, Ken Wilbur¹, Samyukta Jayakumar², Pinakin Davey³, Jake Gardner⁴, Aaron Seitz²; ¹Washington University in St. Louis, ²University of California, Riverside, ³Western University of Health Sciences, ⁴University of Pennsylvania

23.319 Developing a novel dichoptic reading application for the treatment of amblyopia

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nicole A. Dranitsaris¹ (nicoledranitsaris16@gmail.com), Ken Chong¹, Robert F. Hess¹, Alexandre Reynaud¹; ¹McGill Vision Research, Department of Ophthalmology and Visual Sciences, McGill University

23.320 Bringing continuous target-tracking to the clinic: Steps toward developing new tools for assessing visual dysfunction

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Stephanie M. Shields¹ (smshields@utexas.edu), Sabeen Toranian¹, Peter V. Sguigna², Ethan Meltzer³, Lawrence K. Cormack¹; ¹The University of Texas at Austin, ²The University of Texas Southwestern Medical Center, ³Dell Medical School at The University of Texas at Austin

23.321 tCFS: A new 'CFS tracking' paradigm reveals uniform suppression depth regardless of target complexity or salience

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jacob Coorey¹, David Alais¹, Randolph Blake², Matthew Davidson¹; ¹The University of Sydney, ²Vanderbilt

University

23.322 Digital Stereo Test (DST): Static stereopsis assessment in simulated and real depth-deficit patients

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kritika Lohia¹ (kritika.lohia@ee.iitd.ac.in), Rijul Saurabh Soans^{1,2}, Dharam Raj³, Rohit Saxena³, Tapan Kumar Gandhi¹; ¹Department of Electrical Engineering, Indian Institute of Technology-Delhi, New Delhi, India, ²Laboratory of Experimental Ophthalmology, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands, ³Dr. Rajendra Prasad Centre for Ophthalmic Sciences, All India Institute of Medical Sciences-Delhi, New Delhi, India

23.323 Validation of Angular Indication Measurement (AIM) Stereoacuity

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Sonisha Neupane¹ (s.neupane@northeastern.edu), Jan Skerswetat¹, Peter J. Bex¹; ¹Northeastern University

23.324 Refractive Error measured with AIM (Angular Indication Measurement) Visual Acuity

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jingyi He¹ (j.he@northeastern.edu), Jay Bijesh Shah¹, Jan Skerswetat¹, Peter J. Bex¹; ¹Northeastern University, USA

Spatial Vision: Perceptual properties in health and disease

23.325 Behavioral and EEG measures of contrast surround suppression mechanisms in people with schizophrenia

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Hannah R. Moser¹, Kamar S. Abdullahi¹, Amaavi Miriyagalla¹, Samantha A. Montoya¹, Kyle W. Killebrew¹, Scott R. Sponheim^{2,1}, Michael-Paul Schallmo¹; ¹University of Minnesota, ²Minneapolis VA Medical Center

23.326 Functional Dysconnectivity of the Secondary Visual Network in Schizophrenia

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Brian Keane¹ (brian_keane@urmc.rochester.edu), Luke Hearne², Yonatan Abrham¹, Deanna Barch³, Michael Cole², Bart Krekelberg², Steven Silverstein¹; ¹University of Rochester, ²Rutgers University, Newark, ³Washington University in St. Louis

23.327 Further examination of the pulsed- and steady-pedestal paradigms under hypothetical parvocellular- and magnocellular-biased conditions

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jaeseon Song¹ (jaeseon.song@uga.edu), Bruno Breitmeyer², James Brown¹; ¹University of Georgia, ²University of Houston

23.328 Discovery of sharper orientation-tuned surround suppression for oblique than cardinal orientations provides support for a multi-stage model of normalization

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Hui-Yuan Miao¹ (huiyuan.miao@vanderbilt.edu), David Coggan¹, Frank Tong^{1,2}; ¹Department of Psychology, Vanderbilt University, ²Vanderbilt Vision Research Center

23.329 Radial bias alters perceived motion direction

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Melisa Manceloglu¹ (melisa_manceloglu@brown.edu), Ken Nakayama², Joo-Hyun Song¹; ¹Brown University, ²University of California, Berkeley

23.330 Contextual Modulation of Sensory Encoding in the Tilt Illusion

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ling-Qi Zhang¹ (zlqzcc@gmail.com), Alan A. Stocker¹; ¹University of Pennsylvania

23.331 Enhanced Luminance Improves Salience of Objects if it also Enhances Contrast

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Andrew Freedman¹ (freed055@umn.edu), Gordon Legge¹; ¹University of Minnesota

Attention: Temporal, divided

23.332 Voluntary temporal attention enhances sensory representations

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jiating Zhu¹ (jtszhu@bu.edu), Karen Tian^{1,2}, Marisa Carrasco², Rachel Denison^{1,2}; ¹Boston University, ²New York University

23.333 Neural correlates of inducing fatigue with a sustained attention task

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Simon Hanzal¹ (s.hanzal.1@research.gla.ac.uk), Gemma Learmonth¹, Gregor Thut¹, Monika Harvey¹; ¹University of Glasgow

23.334 Attention and expectation jointly modulate the temporal dynamics of visual processing

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nicholas Crotty¹ (ncrotty@trincoll.edu), Nicole Massa¹, Dagoberto Tellez¹, Alex White², Michael Grubb¹; ¹Trinity College, ²Barnard College

23.335 Comparing auditory and visual temporal attention

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Juneau Wang¹ (juneauw@bu.edu), Christopher Conroy², Rachel Denison¹; ¹Boston University, ²SUNY College of Optometry

23.336 Endogenous temporal attention benefits performance even under temporal uncertainty

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Aysun Duyar¹ (aysun@nyu.edu), Shiyang Ren¹, Marisa Carrasco¹; ¹New York University

23.337 Multitasking without task switching

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jumi Lee¹ (heiheidi245@gmail.com), Oakyoon Cha¹; ¹Sungshin Women's University

23.338 Effect of temporal interruptions on sequential sensory integration

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Mengting Fang¹ (mtfang@sas.upenn.edu), Jiang Mao¹, Tobias Donner², Alan Stocker¹; ¹University of Pennsylvania, ²University Medical Center Hamburg-Eppendorf

23.339 Distributed and focused visuo-spatial attention deficits in children with dyslexia

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Simone Gori¹ (simone.gori@unibg.it), Sandro Franceschini^{2,3}, Sara Bertoni^{1,2}, Giovanna Puccio², Cristiano Termine³, Andrea Facoetti²; ¹University of Bergamo, ²University of Padua, ³University of Insubria

23.340 Multifocal attention within a single hemifield results in broad tuning of attention across relevant and irrelevant locations.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Mart Ozkan¹ (mert.ozkan.gr@dartmouth.edu), Viola Stoermer¹; ¹Dartmouth College

23.341 No evidence that attentionally demanding dual tasks disrupt visual processing capacity in a gamified orientation-averaging task

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Wing Hong Fu¹ (w.fu@westernsydney.edu.au), Gabrielle Weidemann¹, Tijn Grootswagers¹, Larissa Cahill², John Cass¹; ¹The MARCS Institute for Brain, Behaviour and Development, Western Sydney University, ²Defence Sciences Technology Group

23.342 Diversity of items within attentional window explains "cost-free" diversity judgments

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Suyeon Kim¹ (eoddysl@naver.com), Oakyoon Cha¹; ¹Sungshin Women's University

23.343 Useful field of view performance in healthy aging is linked to visuo-perceptive processes

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Romain Hassan Omar¹ (romain.hassan.omar@umontreal.ca), Adunni Garber², Geneviève Rodrigue³, Aarlenne Khan⁴; ¹University of Montreal

23.344 Gender comparison of perceptual-cognitive learning in young athletes.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Isabelle Legault¹ (isabelle.legault.3@gmail.com), Jocelyn Faubert²; ¹Collège Lionel Goulx, ²Faubertlab, Université de Montreal

Attention: Endogenous, exogenous

23.345 Alteration of endogenous visuospatial attention orientation during 10 Hz or 40 Hz transcranial alternating current stimulation to right temporoparietal junction and occipital visual areas

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ashley Mendoza¹ (anm190@scarletmail.rutgers.edu), Ashley Yttredahl¹, Yinghua Liu¹, David Smith², Bart Krekelberg¹; ¹Rutgers University - Newark, ²Temple University

23.346 Resolution of Exogenous Shifts of Attention is Impacted by Peripheral Stimuli Eccentricity

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Chris Reynolds¹ (reynol89@uwm.edu), Adam Greenberg^{2,3}; ¹University of Wisconsin Milwaukee, ²Medical College of Wisconsin, ³Marquette University

23.347 Task-irrelevant abrupt onsets disrupt value-related information processing

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Carly Chak¹, Emily Machniak¹, Barry Giesbrecht¹; ¹University of California, Santa Barbara

23.348 Presaccadic attention sharpens visual acuity around the visual field

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yuna Kwak¹ (yuna.kwak@nyu.edu), Nina Hanning^{1,2}, Marisa Carrasco¹; ¹New York University, ²Humboldt-Universität zu Berlin

23.349 The effects of high-resolution exogenous attention on different spatial frequencies in the fovea

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yue Zhang¹ (yue.zhang604@gmail.com), Martina Poletti¹; ¹University of Rochester

23.350 Adaptation modulates the effect of covert exogenous attention in early visual cortex – A TMS study

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Hsing-Hao Lee¹ (hsinghaolee@nyu.edu), Antonio Fernández¹, Marisa Carrasco¹; ¹New York University

23.351 Distinct modulation of FEF during orienting and reorienting of exogenous and endogenous attention

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Elena Younhye Ock¹ (elena.ock@nih.gov), Cassie Joynes², Tina T. Liu¹, Elisha P. Merriam¹; ¹Laboratory of Brain and Cognition, National Institute of Mental Health, NIH, Bethesda, MD, USA, ²Lab of Behavioral Neuroscience, National Institute on Aging, NIH, Bethesda, MD

23.352 Exogenous spatial attention shift induced by up and down vection direction

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Xuanru Guo¹ (guoxuanru1101@gmail.com), Takeharu Seno¹, Stephen Palmisano²; ¹Faculty of Design, Kyushu University, ²School of Psychology, University of Wollongong

Visual Search: Features, models, neural

23.353 Using Probe Trials Reduces the Low-Prevalence Effect but Target Generalization is Limited

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Mark W. Becker¹ (becker54@msu.edu), Andrew Rodriguez¹; ¹Michigan State University

23.354 Differences in similarity effects across target categories

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Anatolii Evdokimov¹, Arryn Robbins¹; ¹University of Richmond

23.355 Incidental capture from working memory depends on remembered feature dimension

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Daniel Thayer¹ (danielthayer@ucsb.edu), Thomas Sprague¹; ¹University of California, Santa Barbara

23.356 Computational modeling of 3D team foraging to understand human behaviour and cognition

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Anna Hughes¹ (anna.hughes@essex.ac.uk), Russell Cohen Hoffing², Alasdair Clarke¹; ¹University of Essex, ²DEVCOM Army Research Laboratory

23.357 Perceptual span can explain stimulus-specific cultural differences in visual search

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jun Saiki¹ (saiki.jun.8e@kyoto-u.ac.jp); ¹Kyoto University

23.358 Measuring competitive oscillatory activity in visual cortical populations using fMRI

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Reebal Rafah¹ (reebal.rafah@gmail.com), Geoffrey Ngo², Lyle E Muller³, Ravi S Menon^{4,5}, Ali R Khan⁵, Taylor W Schmitz², Marieke Mur^{6,7}; ¹Neuroscience Graduate Program, Western University, ²Department of Physiology and Pharmacology, Schulich School of Medicine & Dentistry, Western University, ³Department of Mathematics, Faculty of Science, Western University, ⁴Centre for Functional and Metabolic Mapping, Robarts Research Institute, Western University, ⁵Department of Medical Biophysics, Schulich School of Medicine & Dentistry, Western University, ⁶Department of Psychology, Faculty of Social Science, Western University, ⁷Department of Computer Science, Faculty of Science, Western University

23.359 Tracking the Time-Course of Attentional Sharpening using EEG

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ryan S. Williams¹ (ryanscott.williams@mail.utoronto.ca), Jay Pratt¹, Susanne Ferber¹; ¹University of Toronto

23.360 Revisiting the electrophysiological correlates of feature analysis during visual search

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

John McDonald¹ (jmcd@sfu.ca), Daniel Tay¹; ¹Simon Fraser University

23.361 Brain settings across free-viewing tasks: from Exploration to Visual Search and Hybrid Search

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Juan Esteban Kamienkowski¹ (jkamienk@gmail.com), Damian Care¹, Joaquin Ezequiel Gonzalez¹, Anthony J Ries², Matias J Ison³; ¹University of Buenos Aires & National Scientific and Technical Research Council, Argentina, ²U.S. Army Research Laboratory, United States, ³University of Nottingham, United Kingdom

23.362 An ERP investigation of sensory responses preceding first-saccade onsets during visual search.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ryan V. Ringer¹ (ryan.ringer@ucdenver.edu), Tamar Japaridze^{1,2}, Carly J. Leonard¹; ¹University of Colorado, Denver, ²University of Pennsylvania

23.363 Reward Maps Predict Target-present and Target-absent Visual Search

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Gregory J. Zelinsky¹ (gregory.zelinsky@stonybrook.edu), Seoyoung Ahn¹, Zhibo Yang¹, Yupei Chen¹, Sounak Mondal¹, Minh Hoai¹, Dimitrios Samaras¹; ¹Stony Brook University

23.364 Diagnostic images for Alzheimer's Disease show distinctions in biomarker status and scene-related functional activity between patients and healthy controls

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yuetong Bai¹ (ytbai@uchicago.edu), Wilma Bainbridge¹; ¹University of Chicago

23.365 Impact of aging and stroke on a new computerized test of visual attention in far space

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Stéphanie Rossit¹ (s.rossit@uea.ac.uk), Hannah Browning¹, Allan Clark¹, Valerie Pomeroy¹, Helen Morse¹; ¹University of East Anglia, Norwich, UK

23.366 Incidental learning of frequent target features speeds early attentional selection as indexed by the N2pc

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kevin Ortego¹, Douglas Addleman¹, Viola Stoermer¹; ¹Dartmouth College

Aging

23.367 Visuospatial abilities over the lifespan in healthy adults

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Anne-Sophie Laurin¹ (anne-sophie.laurin@umontreal.ca), Jane Abdo¹, Linda Gabriela Dunoyer¹, Denise Y. Henriques², Marius T. Hart², Aarlenne Khan¹; ¹Université de Montréal, ²York University

23.368 Influence of Aging and Cognitive Load on Alpha-band Oscillation

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Catherine Reed¹ (clreed@cmc.edu), Heather Shipley¹, Chandlyr Denaro¹, Alan Hartley¹, Alison Harris¹;

¹Claremont McKenna College

23.369 Individual differences in dopamine neurotransmitter functioning shape age-related differences in oculomotor control

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jutta Billino¹ (jutta.billino@psychol.uni-giessen.de), Sophie Meißner¹; ¹Experimental Psychology, Justus Liebig University Giessen, Giessen, Germany

23.370 Impairment of Perceptual Inhibition in Older adults

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ali Pournaghдали¹ (pournagh@usc.edu), Teal Eich¹; ¹University of Southern California

23.371 Load dependent neural variability quenching during visual working memory is impaired in older adults

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Wen Wen¹, Frederik Baumgardt¹, Douglas Hazel¹, Peyton Berning¹, Vighnesh Viswanathan¹, Olivia Tween¹, Robert Reinhart¹; ¹Department of Psychological and Brain Sciences, Boston University

Saturday Morning Posters in Pavilion

Motion: Models, neural mechanisms

23.401 Strong interaction between low and high spatial frequencies using induced motion at short durations under binocular and dichoptic viewing.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Omar Bachtoula¹ (omarbach@ucm.es), Ignacio Serrano-Pedraza^{1,2}; ¹Universidad Complutense de Madrid, ²Centre for Behaviour and Evolution, Newcastle University

23.402 Linking Intuitive Physics to Social Cognitive Attributions

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Sajjad Torabian Esfahani¹ (torabias@uci.edu), John A Pyles², Yujia Peng³, Hongjing Lu⁴, Emily D Grossman¹; ¹University of California, Irvine, ²University of Washington, ³Peking University, ⁴University of California, Los Angeles

23.403 Prediction of the direction of motion after-effect when the induction phase stimulus is multi-stable

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Juliette Lenouvel^{1,2} (juliette.lenouvel@grenoble-inp.fr), Alan Chauvin², Ronald Phlypo¹; ¹Univ. Grenoble Alpes, CNRS, Grenoble INP, GIPSA-lab (institute of engineering Univ. Grenoble Alpes), ²Univ. Grenoble Alpes, CNRS, LPNC

23.404 Modeling of Human Motion Perception Mechanism: A Simulation based on Deep Neural Network and Attention Transformer

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Zitang sun¹ (sun.zitang.73u@st.kyoto-u.ac.jp), Yen-Ju Chen¹, Yung-Hao Yang¹, Shin'ya Nishida^{1,2}; ¹Cognitive Informatics Lab, Department of Intelligence Science and Technology, Graduate School of Informatics, Kyoto University, Japan, ²Human Information Science Laboratory, NTT Communication Science Laboratories, Nippon Telegraph and Telephone Corporation, Japan

23.405 A simple non-linear neural summation model predicts basic and complex motion perception phenomena

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Raúl Luna¹ (raul.luna@csic.es), Ignacio Serrano-Pedraza², Marcelo Bertalmío¹; ¹Spanish National Research Council (CSIC), Institute of Optics, Madrid, Spain., ²Universidad Complutense de Madrid, Department of Experimental Psychology, Madrid, Spain.

23.406 Spatial summation for motion detection

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Joshua Solomon¹ (j.a.solomon@city.ac.uk), Christopher Tyler¹; ¹City, University of London

23.407 Motion Extrapolation Across the Visual Periphery

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Tero Hakala¹ (tero.hakala@aalto.fi), Jami Pekkanen², Otto Lappi², Samuel Tuhkanen², Lauri Oksama³; ¹Finnish National Defense University, Helsinki, Finland, ²University of Helsinki, Helsinki, Finland, ³University of Turku, Turku, Finland

23.408 Bayesian analysis of motion priors and speed discrimination in the periphery

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Amy Nguyen¹, Michael Landy², Eero Simoncelli^{2,3}, Kathryn Bonnen¹; ¹Indiana University School of Optometry, ²New York University, ³Flatiron Institute, New York, NY

23.409 Using perception and short latency ocular-following responses (OFRs) to study early visual motion-detecting mechanisms.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Boris Sheliga¹ (bms@lsr.nei.nih.gov), Edmond FitzGibbon¹; ¹Laboratory of Sensorimotor Research, NEI, NIH

23.410 Natural-image-computable Bayesian model for 3D motion estimation

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Daniel Herrera¹ (dherrera1911@gmail.com), Johannes Burge^{1,2,3}; ¹Department of Psychology, University of Pennsylvania, Philadelphia, PA, USA, ²Neuroscience Graduate Group, University of Pennsylvania, Philadelphia, PA, USA, ³Bioengineering Graduate Group, University of Pennsylvania, Philadelphia, PA, USA

23.411 Modeling fMRI responses to complex dynamic stimuli with two-stream convolutional networks

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Hamed Karimi¹ (hamedk72@gmail.com), Jeff Wang¹, Nicholas Arangio¹, Stefano Anzellotti¹; ¹Department of Psychology and Neuroscience, Boston College, Boston, MA 02467, USA

23.412 Causal inference predicts the effect of motion uncertainty in motion integration/segregation tasks.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Boris Penalzoza¹ (bpenaloz@ur.rochester.edu), Sabyasachi Shivkumar¹, Gabor Lengyel¹, Gregory DeAngelis¹, Ralf Haefner¹; ¹University of Rochester

Temporal Processing: Duration, timing perception

23.413 Modality-independent biases in temporal processing

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Jozsef Fiser^{1,2} (fiserj@ceu.edu), Linda Garami^{1,2}; ¹Department of Cognitive Science, Central European University, ²Center for Cognitive Computation, Central European University

23.414 Target-Tracking Retinal Stabilization for Studying Peripheral Motion Perception

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Anthony LoPrete¹ (aloprete@seas.upenn.edu), Johannes Burge¹; ¹University of Pennsylvania

23.415 Human visual sampling adaptation to the temporal structure of a dynamic environment

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Jaume Boned¹ (jboned@ub.edu), López-Moliner Joan¹; ¹Vision and Control of Action (VISCA) Group, and Institut de Neurociències, Universitat de Barcelona

23.416 Adaptation-based duration distortion shows face category specificity

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Akira Sarodo¹, Kentaro Yamamoto², Katsumi Watanabe¹; ¹Waseda University, ²Kyushu University

23.417 Bi-phasic filter model can account for the Transient Twinkle Perception

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Chang yeong Han¹ (hcy0515@unist.ac.kr), Seonggyu Choe¹, Hyosun Kim², Oh-Sang Kwon¹; ¹Department of Biomedical Engineering, Ulsan National Institute of Science Technology, Ulsan 44919, South Korea, ²R&D center, Samsung Display, South Korea

23.418 The effect of visual affordance on perceived duration during motor action in virtual reality

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Sunny Jin¹ (sunnyjin41@gmail.com), Inci Ayhan¹; ¹Bogazici University, Istanbul, Turkey

23.419 A bouncing ball improves performance in time discrimination and production

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Anthony Bruno¹ (anthony_bruno@brown.edu), Leslie Welch¹; ¹Brown University

23.420 Time perception and emotion in a real-life human-robot swarm interaction

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Müge Cavdan¹ (muege.cavdan@psychol.uni-giessen.de), Julian Kaduk^{2,3}, Argiro Vatakis⁴, Heiko Hamann^{2*}, Knut Drewing^{1*}; ¹Justus Liebig University Giessen, Germany, ²University of Konstanz, Germany, ³University of Lübeck, Germany, ⁴Panteion University of Social and Political Sciences, Greece

23.421 Development of audio-tactile temporal binding with and without vision

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Maria Bianca Amadeo¹ (mariabianca.amadeo@iit.it), Alessia Tonelli¹, Walter Setti¹, Carolina Tammurello^{1,2}, Claudio Campus¹, Monica Gori¹; ¹Italian Institute of Technology, ²Università degli studi di Genova

23.422 The perceived duration of peripheral stimuli does not differ between the inhibition and execution of saccades

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Alina Krug¹ (alina.krug@uni-ulm.de), Lisa Eberhardt, Anke Huckauf; ¹Ulm University

23.423 Does the visual system temporally demarcate the complex flow of liquids?

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Yuting Zhang¹, Tristan Yates¹, Ilker Yildirim¹; ¹Yale University

Perception & Action: Reaching, aiming, interception

23.424 Functional Brain Networks for Egocentric and Allocentric Memory-guided Reaching.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Lina Musa^{1,3}, Amirhossein Ghaderi¹, Ying Chen, J. Douglas Crawford¹⁻³; ¹Centre for Vision Research, York University, Toronto, ON, Canada, ²Vision Science to Applications (VISTA), York University, Toronto, ON, Canada, ³York University, Toronto, ON, Canada

23.425 Influence of a visual landmark shift on memory-guided reaching in monkeys

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Jennifer Lin¹ (linj68@yorku.ca), Hongying Wang¹, Saihong Sun¹, Xiaogang Yan¹, John Douglas Crawford¹; ¹York University

23.426 Conflicting ordinal depth information interferes with visually-guided reaching

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Domenic Au¹ (domau@my.yorku.ca), Robert S. Allison¹, Laurie M. Wilcox¹; ¹York University

23.427 Assessment and recovery of visually guided reaching following cerebellar stroke.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Christopher L. Striemer^{1,2} (striemerc@macewan.ca), Chella M. Robles¹, Britt Andeson³, Sean P. Dukelow⁴; ¹MacEwan University, Edmonton, Alberta, Canada, ²Neuroscience and Mental Health Institute, University of

Alberta, Edmonton, Alberta, Canada, ³University of Waterloo, Waterloo, Ontario, Canada, ⁴University of Calgary, Calgary, Alberta, Canada

23.428 Effects of expertise and age on reaching movements guided by vision, memory and proprioception.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Jose Reynoso¹ (jose_reynoso@urmc.rochester.edu), Emily Isenstein^{1,2,3}, Mariah Steele⁵, Khai Du⁶, Leonardo Benavides⁶, Ania Busza⁶, Dujie Tadin^{1,2,3,4}; ¹Department of Brain and Cognitive Sciences, University of Rochester, ²Center for Visual Science, University of Rochester, ³Department of Neuroscience, University of Rochester, ⁴Department of Ophthalmology, University of Rochester, ⁵Program of Dance and Movement, University of Rochester, ⁶Department of Neurology, University of Rochester

23.429 Developmental characteristics of visuomotor adaptation strategies in childhood

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Alexander Cook¹ (acook@psych.ubc.ca), Melissa Aziz¹, Ahad Zafar¹, Deborah Giaschi¹, Hee Yeon Im¹; ¹University of British Columbia

23.430 Pointing at static targets in a virtual reality environment: performance of visually impaired vs. normally-sighted persons

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Vasiliki Myrodia¹, Aurélie Calabrèse¹, Ambre Denis-Noël¹, Frédéric Matonti², Pierre Kornprobst³, Eric Castet¹; ¹Aix-Marseille University, CNRS, LPC, Marseille, France, ²Centre Monticelli Paradis d'Ophtalmologie, Marseille, France, ³Université Côte d'Azur, Inria, France

23.431 Effects of Spatial Congruence between Responses and Stimuli in Reachable and Unreachable Space

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Michael L. Paavola¹ (michael-paavola@uiowa.edu), J. Toby Mordkoff¹, Cathleen M. Moore¹; ¹University of Iowa

23.432 Not all actions violate Weber's law

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Francesco Ceccarini¹ (fc2284@nyu.edu), Ivan Camponogara¹, Robert Volcic¹; ¹New York University Abu Dhabi

23.433 Continuous visual guidance of the moving hand

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Eli Brenner¹ (e.brenner@fbw.vu.nl), Jeroen B.J. Smeets¹; ¹Vrije Universiteit Amsterdam

23.434 Predictability of object motion trajectory modulates information integration for continuous manual tracking

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Zhongting Chen¹ (ztchen@psy.ecnu.edu.cn), Yuqi You¹; ¹East China Normal University

23.435 Cross recurrence analysis of a ball retrieval task in Virtual Reality

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Balagopal Raveendranath¹ (braveen@clemsun.edu), Roshan Venkatakrishnan¹, Rohith Venkatakrishnan¹, Christopher Pagano¹, Sabarish Babu¹; ¹Clemson University

23.436 An information-driven nonlinear dynamical model of manual lateral interception

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Danial Borooghani¹ (danial.borooghani@univ-amu.fr), Remy Casanova¹, Frank T. J. M. Zaal², Reinoud J. Bootsma¹;

¹Aix Marseille Université, CNRS, France, ²University Medical Center Groningen, The Netherlands

23.437 Examining the Affordance of Interceptability: What makes a ball interceptable or not?

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Samruddhi Damle¹ (s.damle@rug.nl), Reinoud J. Bootsma², Frank T. J. M. Zaal¹; ¹University Medical Center

Groningen, The Netherlands, ²Aix Marseille Université, CNRS, France

Perception and Action: Navigation and flow in virtual environments

23.438 Allocentric spatial representations dominate when switching between real and virtual worlds

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Meaghan McManus¹ (meaghan.mcmanus@psychol.uni-giessen.de), Franziska Seifert¹, Immo Schütz¹, Katja

Fiehler¹; ¹Experimental Psychology, Justus Liebig University Giessen, Giessen, Germany

23.439 Spatial learning of a virtual environment with and without an unoccluded vista view

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Ho Ming Chan¹, Jie Ding¹, Jeffrey Saunders¹; ¹The University of Hong Kong

23.440 Unexpected Vection predicts the likelihood and severity of Sickness During HMD based Virtual Reality

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Joel Teixeira¹ (jt629@uowmail.edu.au), Sebastien Mielliet¹, Stephen Palmisano¹; ¹University of Wollongong

23.441 Visual Collision Avoidance in a Crowd

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Kyra Veprek¹ (kyraveprek24@gmail.com), William Warren; ¹Brown University

23.442 Motion-in-depth uncertainty is not much worse than lateral uncertainty: evidence from continuous psychophysics

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Joan López-Moliner¹ (j.lopezmoliner@ub.edu); ¹Universitat de Barcelona

23.443 Evidence for a hybrid model in moving target interception

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Michael Beyeler¹, Justin Kasowski¹, Anvitha Akkaraju¹; ¹University of California, Santa Barbara

23.444 A variational autoencoder provides novel, data-driven features that explain functional brain representations in a naturalistic navigation task

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Cheol Jun Cho¹, Tianjiao Zhang¹, Jack L. Gallant¹; ¹UC Berkeley

23.445 Visual Navigation Under High-Stress Conditions

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Apurv Varshney¹ (apurv@ucsb.edu), Mitch Munns¹, Justin Kasowski¹, Mantong Zhou¹, Chuanxiuyue He¹, Scott Grafton¹, Barry Giesbrecht¹, Mary Hegarty¹, Michael Beyeler¹; ¹University of California Santa Barbara

23.446 Is optic flow used for steering to a goal?

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Nathaniel Powell¹, Youjin Oh¹, Dan Panfili¹, Mary Hayhoe¹; ¹University of Texas at Austin

23.447 Optic flow density modulates corner-cutting behavior in a virtual reality driving task

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Arianna P. Giguere¹ (apg7742@rit.edu), Krystel R. Huxlin^{2,3}, Brett R. Fajen⁴, Dujie Tadin³, Gabriel J. Diaz^{1,3}; ¹Rochester Institute of Technology Center for Imaging Science, ²Flaum Eye Institute, University of Rochester Medical Center, ³University of Rochester Center for Visual Science, ⁴Rensselaer Polytechnic Institute Department of Cognitive Science

Multisensory Processing: Visuo-haptic

23.448 Localizing Visual Allodynia in Migraine

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Carson C Smith¹, Matthew Cummings¹, Laura I Van Key¹, Sarah M Haigh¹; ¹University of Nevada, Reno

23.449 Decoding familiar visual object categories in the MU rhythm oscillatory response

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Fraser Smith¹ (fraser.smith@uea.ac.uk), Saber Sami¹, Kerri Bailey¹; ¹University of East Anglia

23.450 Visual displacement judgments are biased by haptic cues within a flexible spatiotemporal window

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Nedim Goktepe¹ (goektepe@staff.uni-marburg.de), Knut Drewing², Alexander C. Schütz¹; ¹Philipps-Universität Marburg, ²Justus-Liebig-Universität Giessen

23.451 Tap-and-pop and pip-and-pop: Tactile, auditory and audiotactile signals facilitate change detection of moving visual stimuli

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Bora Celebi¹ (bora.celebi@psychol.uni-giessen.de), Müge Cavdan¹, Knut Drewing¹; ¹Justus-Liebig University, Gießen, HapLab

23.452 Scale-based modulation of spatio-temporal integration processes during the exploration of embossed images

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Anchal Sharma¹ (anchals@mit.edu), P.V.M. Rao², Srinivasan V.², Pawan Sinha¹; ¹Massachusetts Institute of Technology, ²Indian Institute of Technology Delhi

23.453 Cortical areas involved in imagery and haptic exploration of object size

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Samantha Sartin¹ (samantha.sartin@unitn.it), Federica Danaj², Fabio Del Giudice¹, Irene Sperandio¹, Simona Monaco¹; ¹University of Trento, ²University of Regensburg

23.454 Characterizing and decoding visual percepts of real objects in a blind individual using fMRI

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Jesse Breedlove¹ (jbreedlo@umn.edu), Logan Dowdle¹, Thomas Naselaris¹, Cheryl Olman¹; ¹University of Minnesota

23.455 The correlation of tactile properties of fabrics between visual and touch.

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Qinyuan Li¹ (cm18ql@leeds.ac.uk), Kaida Xiao¹, Michael Pointer¹, Ningtao Mao¹; ¹University of Leeds

23.456 The Effect of Visual Movement Information on Texture Discrimination Performance and Movement Control in Active Touch

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Didem Katircilar¹ (didem.katircilar@psychol.uni-giessen.de), Knut Drewing¹; ¹Justus Liebig University Giessen

23.457 Prior static visual information on material properties increases the efficiency of a subsequent haptic exploration

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Michaela Jeschke¹ (michaela.jeschke@psychol.uni-giessen.de), Knut Drewing¹; ¹Justus-Liebig University Gießen

23.458 Phantom tactile sensations induced by double vision

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Robert Volcic¹, Mariam Amer¹; ¹New York University Abu Dhabi

23.459 Decoding the Mass of Familiar Objects from MEG

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Willian De Faria¹ (wdefaria@mit.edu), Pramod R.T.¹, Nancy Kanwisher¹; ¹Massachusetts Institute of Technology

Visual Memory: Long term memory

23.460 Hippocampal and visual cortex contributions to resolving competition during

memory-guided attention

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Serra E Favila¹ (sef2177@columbia.edu), Mariam Aly¹; ¹Columbia University

23.461 Images viewed for longer durations are better remembered during naturalistic encoding

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Shaimaa masarwa¹, Olga Kreichman¹, Limor Brook¹, Sharon Gilaie-Dotan^{1,2}; ¹Bar Ilan University, ²UCL

23.462 Long-term memory for objects in real-world scenes: The effects of semantic consistency and task priorities

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Sara Spotorno¹ (sara.spotorno@durham.ac.uk), Sebastian Tustanowski²; ¹Psychology Department, Durham University, UK, ²School of Psychology, Keele University, UK

23.463 Long-term representations systematically bias ongoing perception

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Irene Echeverria-Altuna¹ (ireneetxeberria@gmail.com), Sage E.P. Boettcher¹, Anna C. Nobre¹; ¹University of Oxford

23.464 Memory augmentation with adaptive cognitive interfaces

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Julia Pruin¹, Wilma Bainbridge¹, Monica Rosenberg¹, Megan deBettencourt¹; ¹University of Chicago

23.465 Predictable learning demands enable direct down-regulation of visual long-term memory encoding

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Joseph M. Saito¹ (joseph.saito@mail.utoronto.ca), Keisuke Fukuda^{1,2}; ¹University of Toronto, ²University of Toronto Mississauga

23.466 The dependence (or independence) of object features in VLTm is a continuous, not a binary problem: The role of conceptual vs. perceptual features

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Nurit Gronau¹ (nuritgro@openu.ac.il), Rotem Avital-Cohen¹; ¹The Open University of Israel

23.467 Uncovering the dynamics of visual memory representations over time

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Eden zohar¹ (edenzohar04@gmail.com), Dekel Abeles¹, Stas Kozak¹, Nitzan Censor¹; ¹Tel Aviv University

23.468 Physical image properties influence image memorability in a category-dependent manner

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Sharon Gilaie-Dotan^{1,2} (shagido@gmail.com), Olga Kreichman¹, Limor Brook¹, Shaimaa Masarwa¹; ¹Bar Ilan University, ²UCL

23.469 Probabilistic encoding and well-calibratedness of long-term episodic memory

Saturday, May 20, 2023, 8:30 am – 12:30 pm, Pavilion

Dávid Magas^{1,2} (magas_david@phd.ceu.edu), József Fiser^{1,2}; ¹Department of Cognitive Science, Central European University, ²Center for Cognitive Computation, Central European University

Saturday Afternoon Posters in Banyan Breezeway

Color, Light and Materials: Lightness, brightness

26.301 Separate normalization of ON / OFF channels is not enough to account for perceived brightness

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Joris Vincent¹ (joris.vincent@tu-berlin.de), Marianne Maertens¹; ¹Technische Universität Berlin

26.302 The role of rod and cone signals in mesopic brightness induction

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Pablo A. Barrionuevo^{1,2} (pbarrionuevo@herrera.unt.edu.ar), Alexander C. Schütz³, Karl R. Gegenfurtner¹; ¹Justus Liebig Universität Gießen, ²Consejo Nacional de Investigaciones Científicas y Técnicas, ³Philipps-Universität Marburg

26.303 The asymmetry between achromatic increments and decrements in perceptual scaling and discrimination

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yangyi Shi¹ (shi.yang@northeastern.edu), Rhea T. Eskew, Jr.¹; ¹Northeastern University

26.304 Luminance and heterochromatic brightness

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Shuchen Guan¹ (shuchen.guan@psychol.uni-giessen.de), Robert Ennis¹, Matteo Toscani², Jing Chen³, Karl Gegenfurtner¹; ¹Justus-Liebig Universität, Gießen, ²Bournemouth University, UK, ³Shanghai University of Sport, China

26.305 Effect of Background Color and Light Source Intensity on Lightness Discrimination Thresholds

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Devin Reynolds¹ (djreynolds@aggies.ncat.edu), Vijay Singh¹; ¹North Carolina Agricultural and Technical State University

26.306 Measuring lightness constancy with varying realism

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

David-Elias Künstle¹ (david-elias.kuenstle@uni-tuebingen.de), Felix A. Wichmann¹; ¹University of Tübingen

26.307 Discriminating color ensembles

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Jesse R. Macyszko¹ (jrmacyszko@gmail.com), Michael A. Webster¹; ¹University of Nevada, Reno

26.308 Can deep neural networks for intrinsic image decomposition model human lightness constancy?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Alban Flachot¹ (flachot.alban@gmail.com), Jaykishan Patel¹, Khushbu Patel¹, Tom S. A. Wallis², Marcus Brubaker¹, David H. Brainard³, Richard F. Murray¹; ¹York University, ²TU Darmstadt, ³University of Pennsylvania

26.309 Eye closure elicits qualitatively distinct responses within the lateral geniculate nucleus and visual cortex

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Nicholas Cicero^{1,3} (ngcicero@bu.edu), Michaela Klimova², Laura Lewis^{1,3}, Sam Ling^{1,2}; ¹Graduate Program in Neuroscience, Boston University, ²Department of Psychological and Brain Sciences, Boston University, ³Department of Biomedical Engineering, Boston University

26.310 Free and fast implementations of a novel lightness computational model

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yuki Kobayashi^{1,2,3} (y-koba@gst.ritsumei.ac.jp), Masanori Kanamaru^{2,4}, Akiyoshi Kitaoka¹; ¹Ritsumei University, ²Japan Society for the Promotion of Science, ³American University, ⁴The University of Tokyo

26.311 Statistical properties of 1st- and 2nd-order brightness induction in a disk/annulus paradigm

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Osman B. Kavcar¹ (okavcar@nevada.unr.edu), Michael A. Crognale^{1,2}, Michael E. Rudd^{1,2}; ¹University of Nevada, Reno, ²Center for Integrative Neuroscience

26.312 Linearisation of a monitor for web-based experiments

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Jonathan Peirce^{1,2} (jonathan.peirce@nottingham.ac.uk), Kimberley Dundas², Rebecca Hirst², Nikita Agafonov², Alain Pitiot²; ¹University of Nottingham, Nottingham, UK, ²Open Science Tools Ltd, Nottingham, UK

26.313 Optimizing data acquisition for MLDS: when is it valid to take a short-cut?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Guillermo Aguilar¹ (guillermo.aguilar@mail.tu-berlin.de), Jakob Grünwald², Marianne Maertens¹; ¹Technische Universität Berlin, Germany, ²Université Côte d'Azur, France.

Color, Light and Materials: Cognition

26.314 Color naming, color identification, and the focal color terms

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Angela brown¹ (brown.112@osu.edu), Delwin Lindsey¹; ¹Ohio State University

26.315 Hue ensemble segregation does not rely on color categories

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Lari Virtanen¹ (lari.virtanen@helsinki.fi), Maria Olkkonen¹, Toni Saarela¹; ¹University of Helsinki

26.316 Hue variation masks effects of lightness on interpretations of colormap data visualizations

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Clementine Zimmnicki^{1,2} (clemzimmnicki@gmail.com), Danielle Albers Szafir³, Karen B. Schloss^{1,2}; ¹Department of Psychology, University of Wisconsin–Madison, ²Wisconsin Institute for Discovery, University of Wisconsin–Madison, ³Department of Computer Science, University of North Carolina, Chapel Hill

26.317 Investigation of the opaque-is-more bias reveals a high chroma-is-more bias for colormap data visualizations

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Melissa A. Schoenlein¹ (schoenlein@wisc.edu), Mouloukou D. Sidibe², Karen B. Schloss¹; ¹University of Wisconsin-Madison, ²Lycoming College

Attention: Top-down, reward

26.318 Active attentional suppression and its limitations in the template-for-rejection effect

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Tomoyuki Tanda¹ (t.tanda@let.hokudai.ac.jp), Jun-ichiro Kawahara²; ¹Hokkaido University

26.319 Are complex attentional templates restricted to a single location?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Keith Racioppo¹, Benjamin Tamber-Rosenau¹; ¹University of Houston

26.320 Reduced contextual variability facilitates learned attending towards task-relevant features and away from distracting information

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Chris Jungerius^{1,2} (d.c.jungerius@uva.nl), Sophie Perizonius¹, Heleen Slagter¹; ¹Vrije Universiteit Amsterdam, ²University of Amsterdam

26.321 Selection errors: How do target and distractor features affect attentional capture and learning of spatial distractor regularities?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Aylin A. Hanne¹ (aylin.hanne@uni-marburg.de), Jan Tünnermann¹, Anna Schubö¹; ¹Philipps-University Marburg

26.322 Spatial distraction reverses category-tuned attentional filters by disrupting both facilitation and suppression

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Blaire Dube¹ (dube.25@osu.edu), Lasyapriya Pidaparthi^{1,2}, Julie D. Golomb¹; ¹The Ohio State University, ²Vanderbilt University

26.323 Effort-driven attentional capture

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Molly McKinney¹ (mollyr.mckinney@tamu.edu), David Lee², Brian Anderson³; ¹Texas A&M University

26.324 Learned reliability of a distracting cue impacts feature errors

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

John A. McNally¹ (johnamcnally@outlook.com), William Narhi-Martinez¹, Andrew B. Leber¹, Julie D. Golomb¹;

¹Department of Psychology, The Ohio State University

26.325 Value-Driven Attentional Capture and Reward Variability

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sojung Youn¹ (syoun@tamu.edu), Brian Anderson¹; ¹Texas A&M University

26.326 It's All About Me: Attentional Prioritization of Self-Rewarding Information

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Rebecca Warren¹ (rebeccawarren@tamu.edu), Andrew Clement¹, Brian Anderson¹; ¹Texas A&M University

Face Perception: Individual differences

26.327 Contribution of a common ability in judgments for the mode of object identities

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Oakyoona Cha¹ (oakyoona.cha@sungshin.ac.kr); ¹Sungshin Women's University

26.328 Face recognition plays a role in ensemble judgments of facial features

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Soo Jin Kim¹ (soojin3926@gmail.com), Oakyoona Cha¹; ¹Sungshin Women's University

26.329 Effects of Age and Fixation Location on Face Identification

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Eric Cui^{1,2} (mcui@research.baycrest.org), Farhan Abdul Vaheed³, Eugenie Roudaia², Björn Herrmann^{1,2}, Allison B. Sekuler^{1,2,3}; ¹Psychology, University of Toronto, ²Rotman Research Institute, Baycrest, ³Psychology, Neuroscience & Behaviour, McMaster University

26.330 Individual differences in judging facial categories

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Kassandra R. Lee¹ (kassandrall@nevada.unr.edu), Michael A. Webster¹; ¹Integrative Neuroscience, Dept. of Psychology, University of Nevada, Reno

26.331 Individual differences in rapid face-directed saccades

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Maximilian Davide Broda¹ (maximilian.broda@psychol.uni-giessen.de), Benjamin de Haas¹; ¹Justus Liebig University Giessen

26.332 Stable individual differences in the serial dependence of face perception

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yuki Murai¹ (ymurai@nict.go.jp), David Whitney²; ¹National Institute of Information and Communications Technology, ²University of California, Berkeley

26.333 The computational value of face information sampled by super-recognizers

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sebastien Miellet¹ (smiellet@uow.edu.au), James D. Dunn², Victor P. L. Varela², Bojana Popovic², Stephanie Summersby², David White²; ¹University of Wollongong, ²UNSW Sydney

26.334 Impact of judgment criteria on the hue-dependent brightness perception of face

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yuanyuan He¹ (heyuanyuan@chiba-u.jp), Hiromi Y. Sato¹, Yoko Mizokami¹; ¹Chiba University, Japan

26.335 Does Observers' Ethnicity Influence Visual Strategies for Gender and Expressiveness Judgments ?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Isabelle Charbonneau¹ (isabellecharbonneau8@gmail.com), Vicki Ledrou-Paquet¹, Caroline Blais¹, Daniel Fiset¹; ¹Universite du Quebec en Outaouais, ²Psychoeducation and Psychology department

26.336 Mixed-race categorization of Asian-White and Asian-Black faces in Taiwanese children and adults: effect of skin color revealed by a 3AFC task

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sarina Hui-Lin Chien^{1,2} (sarinachien@mail.cmu.edu.tw), Chien-Kai Chang¹, Evelyn Hsin-Yi Tsai³, I-Fan Lin⁴; ¹Graduate Institute of Biomedical Sciences, China Medical University, Taiwan, ²Center for Neuroscience and Brain Diseases, China Medical University, Taiwan, ³Graduate Program of Cognitive Sciences in Education, Columbia University, NYC, ⁴Department of Clinical Toxicology and Occupational Medicine, Taipei Veterans General Hospital, Taiwan

26.337 Development of Electrophysiological Correlates of Face/non-face Distinction in Children with Late Sight Onset

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Chetan Ralekar¹ (cralekar@mit.edu), Shefali Gupta², Tapan Kumar Gandhi², Sharon Gilad-Gutnick¹, Dhun Verma³, Priti Gupta⁴, Suma Ganesh⁵, Umang Mathur⁵, Pawan Sinha¹; ¹Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, MA, USA, ²Department of Electrical Engineering, Indian Institute of Technology Delhi, New Delhi, India, ³Project Prakash, Dr. Shroff's Charity Eye Hospital, Delhi, India, ⁴Amarnath and Shashi Khosla School of Information Technology, Indian Institute of Technology, Delhi, India, ⁵Department of Ophthalmology, Dr. Shroff's Charity Eye Hospital, Delhi, India

26.338 The visual perks of (not) being a wallflower: how individual differences in social intelligence predict face recognition performance

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Maleah J. Carter¹, Spencer Andrews¹, Shruti Japee¹, J. Brendan Ritchie¹; ¹Laboratory of Brain and Cognition, NIMH, NIH

26.339 Autistic adults exhibit highly precise representations of others' emotions but a reduced influence of emotion representations on emotion recognition accuracy

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

JENNIFER COOK¹ (j.l.cook@bham.ac.uk), Connor Keating¹, Eri Ichijo²; ¹University of Birmingham, ²University of Oxford

Face Perception: Emotion

26.340 The impact of face ethnicity on the detection of pain facial expressions

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Daphnée Sénécal¹ (daphnee.senecal@outlook.com), Marie-Pier Plouffe-Demers², Daniel Fiset³, Caroline Blais⁴;
¹Université du Québec en Outaouais, ²Université du Québec à Montréal

26.341 Which gender do we perceive in a painful face?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Camille Saumure¹ (camille.saumureregimbald@unifr.ch), Caroline Blais², Daniel Fiset², Roberto Caldara¹;
¹University of Fribourg, ²University of Quebec in Outaouais

26.342 Mental Representations of Pain: the Effect of the Sex of the Perceiver

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Arianne Richer¹, Marie-Pier Plouffe-Demers^{1,2}, Francis Gingras^{1,2}, Daniel Fiset¹, Caroline Blais¹; ¹Université du Québec en Outaouais (UQO), ²Université du Québec à Montréal (UQAM)

26.343 Emotional judgments depend on perceived gender

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sheida Mirzaei Domabi¹ (mirsh-25@rhodes.edu), Ellie Leahey², Jason Haberman³; ¹Rhodes college

26.345 Longer presentation duration helps to individuate faces in an RSVP stream

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Nidhi Deepu Rajan¹ (nidh0001@e.ntu.edu.sg), Haojiang Ying², Hong Xu¹; ¹Nanyang Technological University, ²Soochow University

26.346 The Contextual Affects of Facial Expression

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Bliss Cui¹ (cui.bl@northeastern.edu), Peter Bex¹, Lisa Feldman Barrett¹; ¹Northeastern University

26.347 Positive and negative facial valence are differently modulated by eccentricity: Replicating and extending earlier findings

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Vasilisa Akselevich¹, Sharon Gilaie-Dotan^{1,2}; ¹Bar-Ilan University, ²UCL

26.348 Unbiased by redundant signals: Negativity bias for emotion perception of single but not two identical faces

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yu R. Dandan¹ (dandan.yu@univ-lille.fr), Li L-Miao^{1,2}, Bilge Sayim^{1,3}; ¹Univ. Lille, CNRS, UMR9193 - SCALab - Sciences Cognitives et Sciences Affectives, F-59000 Lille, France, ²Faculty of Psychology and Educational Sciences, KU Leuven @Kulak, Kortrijk, Belgium, ³Institute of Psychology, University of Bern, Bern, Switzerland

26.349 Angry faces do draw out attention more compared to happy faces

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Young Jun Yoon¹ (dudwns7367@gmail.com), Sung Jun Joo¹; ¹Pusan National University

26.350 Upside-Down Selfies Look Much More Alert and Awake

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Michael K. McBeath^{1,2} (michael.mcbeath@asu.edu), Mathew D. Langley¹, Sophia Baia¹; ¹Arizona State University, ²Max Planck Institute for Empirical Aesthetics

26.351 Modeling Emotional Cue Integration of Context-rich and Dynamic Stimuli reveals Bayesian as well as anti-Bayesian Properties

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Jefferson Ortega¹ (jefferson_ortega@berkeley.edu), Yuki Murai², David Whitney¹; ¹University of California, Berkeley, ²National Institute of Information and Communications Technology

26.352 The visual representation of pain facial expressions: a high-definition transcranial direct current stimulation study

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Marie-Claude Desjardins¹ (mc.desjardins00@gmail.com), Daphnée Sénécal¹, Sara Tremblay^{1,2,3}, Daniel Fiset¹, Francis Gingras¹, Caroline Blais¹; ¹University of Québec in Outaouais, ²Neuromodulation Research Clinic, Royal's Institute of Mental Health Research, ³Department of Cellular and Molecular Medicine, University of Ottawa

26.353 Decoding the neural representations of emotional faces in stereo- versus monoscopic viewing conditions

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Felix Klotzsche^{1,2,3} (klotzsche@cbs.mpg.de), Ammara Nasim^{1,4}, Simon M. Hofmann^{1,5}, Arno Villringer^{1,2}, Vadim V. Nikulin¹, Werner Sommer^{2,3,6}, Michael Gaebler^{1,2}; ¹Max Planck Institute for Human Cognitive and Brain Sciences, ²Humboldt-Universität zu Berlin, Berlin School of Mind and Brain, Germany, ³Humboldt-Universität zu Berlin, Department of Psychology, Germany, ⁴Carl von Ossietzky Universität Oldenburg, Germany, ⁵Fraunhofer Institute Heinrich Hertz, Department of Artificial Intelligence, Berlin, Germany, ⁶Zhejiang Normal University, Department of Psychology, Jinhua, China

26.354 Probing the link between dynamics of "face-selectivity" in macaque IT cortex and facial emotion discrimination behavior

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Maren Wehrheim¹ (marenwehrheim@gmail.com), Na Yeon Kim², Ralph Adolphs², Kohitij Kar³; ¹Goethe University Frankfurt, ²California Institute of Technology, ³York University

Undergraduate Just-In-Time 1

26.355 Are Artificial Motion Scotomas Driven by Cortical Feedback or Lateral Inhibition Mechanisms?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Wing Kwan Hannah Chu¹ (wkc267@nyu.edu), Kartik K Sreenivasan^{1,2}, Bas Rokers^{1,2,3}; ¹Psychology, New York University Abu Dhabi, ²Center for Brain & Health, New York University Abu Dhabi, ³Aspire Precision Medicine Institute Abu Dhabi, New York University Abu Dhabi

26.356 Somehow, everything has changed: Event boundaries defined only by unnoticed changes in implicit visuospatial statistics drive active forgetting in visual working memory

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Pranava Dhar¹, Joan Danielle K. Ongchoco¹, Kimberly W. Wong¹, Brian Scholl¹; ¹Yale University

26.357 VWM Impairs Visual Detection: A Function of Shared Attentional or Sensory Resources

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Aysha Hamkari¹ (aah698@nyu.edu), David Melcher^{1,2}; ¹Division of Science, Department of Psychology, New York University Abu Dhabi, ²Center for Brain & Health, NYUAD Research Institute, New York University Abu Dhabi

26.358 Effects of Familiarity in Advertisements Logos During The Attentional Blink

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Shaun Besch¹, Juan Guevara Pinto¹; ¹Rollins College

26.359 Target similarity in the attentional blink explained by recurrent convolutional networks

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Emmanuel Lebeau¹, Daniel Lindh^{2,3}, Adrien Doerig⁴, Tim C. Kietzmann⁴, Ilja G. Sligte², Shapiro Kimron L.³, Ian Charest^{1,3}; ¹Cerebrum, Département de Psychologie, Université de Montréal, Canada, ²Department of Psychology, University of Amsterdam, The Netherlands, ³Centre for Human Brain Health, School of Psychology, University of Birmingham, United Kingdom, ⁴Institute of Cognitive Science, University of Osnabrück, Germany

26.360 Reconstruction of Motion Feature Maps From Human Cortex Using An Augmented Inverted Encoding Model

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Connor Ding¹, Daniel Thayer¹, Thomas Sprague¹; ¹University of California, Santa Barbara

26.361 Seeing both sides of things: Exploring visual consciousness and self-awareness

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Anwesha Das¹, Daw-An Wu¹, Shinsuke Shimojo¹; ¹California Institute of Technology (Caltech)

26.362 The automaticity of 'seeing-in': Pictorial depth cues influence judgments of surrounding spatial relationships even when task-irrelevant

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Kexuan Zhang¹, June Huang¹, Benjamin van Buren¹; ¹The New School

26.363 Interaction of expectancy effects and the illusory object benefit on working memory performance

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Phelix Rodriguez¹, Yin-ting Lin¹, Andrew B. Leber¹; ¹The Ohio State University

26.364 The Things-Action Database

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Natalia Pallis-Hassani¹, Shruti Japee², Chris Baker³, Maryam Vaziri-Pashkam⁴; ¹Lab of Brain and Cognition, National Institute of Mental Health

26.365 Investigating the neural development of social scene perception in young children using naturalistic stimuli

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Elizabeth Jiwon Im¹ (imelizabeth@jhu.edu), Angira Shirahatti¹, Leyla Isik¹; ¹Johns Hopkins University

26.366 Target interception in virtual reality is faster for natural than unnatural trajectory shapes

Saturday, May 20, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sofia Varon¹, Karsten Babin¹, Miriam Sperling², Jody C. Culham¹; ¹Western University, ²University of British Columbia

Saturday Afternoon Posters in Pavilion

Attention: Affect, threat

26.401 Do fewer salient events modulate the emotional attentional blink?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Lindsay A. Santacrose¹ (lsantacr@central.uh.edu), Benjamin J. Tamber-Rosenau¹; ¹University of Houston

26.402 Effects of Emotional Distractors on the Processing of Motion Stimuli

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Changhao Xiong¹ (xiong.changhao@ufl.edu), Ke Bo², Nathan Petro³, Andreas Keil¹, Mingzhou Ding¹; ¹UNIVERSITY OF FLORIDA, ²DARTMOUTH COLLEGE, ³BOYS TOWN NATIONAL RESEARCH HOSPITAL

26.403 Emotional Valence Effects on Facilitation of Cognitive Control

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Sarah B. Malykke¹ (sarahmalykke@gwu.edu), Rebeka C. Almasi¹, Jini Tae², Yoonhyoung Lee³, Myeong-Ho Sohn¹; ¹The George Washington University, ²Gwangju Institute of Science and Technology, ³Yeungnam University

26.404 Failure to replicate an effect of affective state on attentional breadth and attentional blink

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jeffrey Saunders¹ (jisaun@hku.hk), Ho Ming Chan¹; ¹University of Hong Kong

26.405 Generalization of threat-related attentional priority with visual objects

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Kirsten Moore¹ (kirstenmoore277@gmail.com), Laurent Grégoire¹, Andrew Clement¹, Brian Anderson¹; ¹Texas

A&M University

26.406 Inhibition of return (IOR) for negative emotional stimuli: a meta-analysis

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Xiang Li¹ (xiangli1206@163.com), Xinqing Xu¹, Ruihong Liu¹, Hongwei Sun¹, Liping Jia¹, Qianru Xu², Chaoxiong Ye³, Kevin Guo⁴, Hong-jin Sun⁴; ¹Weifang Medical University, China, ²University of Oulu, Finland, ³University of Jyväskylä, Finland, ⁴McMaster University, Canada

26.407 Investigating the interaction between affective arousal and luminance in modulating pupil size

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jasmine Pan¹ (jasminep@bu.edu), Michaela Klimova¹, Joseph McGuire¹, Sam Ling¹; ¹Boston University

26.408 Neural Processing of Affective Scenes: A Comparison between Convolutional Neural Networks and Human Visual Pathways

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Yujun Chen¹ (yujunchen@ufl.edu), Lihan Cui¹, Mingzhou Ding¹; ¹UNIVERSITY OF FLORIDA

26.409 Vicarious learning of threat-related attentional capture

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Laurent Grégoire¹ (lgregoire1@tamu.edu), Mirela Dubravac¹, Kirsten Moore¹, Namgyun Kim², Brian Anderson¹; ¹Texas A&M University, ²University of Dayton

26.410 How robust are negative attentional templates?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Sizhu Han¹ (sizhu.han@uni-marburg.de), Anna Schubö¹; ¹Experimental and Biological Psychology, Philipps-Universität Marburg, Marburg, Germany

Eye Movements: Perception, remapping

26.411 Peri-saccadic mislocalization in a rhesus macaque monkey depends on the visual appearance of the saccade target

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Matthias Philipp Baumann¹ (matthias-philipp.baumann@student.uni-tuebingen.de), Ziad Hafed¹; ¹University of Tübingen

26.412 Pre-saccadic modulation of collinear lateral interactions

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Gabriela Mueller de Melo¹, Isabella de Oliveira Pitorri¹, Gustavo Rohenkohl^{1,2}; ¹Institute of Biosciences, University of São Paulo, São Paulo, Brazil, ²Ernst Strüngmann Institute (ESI) for Neuroscience in Cooperation with Max Planck Society, Frankfurt, Germany

26.413 Post-saccadic impairment of scene perception

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Yong Min Choi¹ (choi.1696@osu.edu), Tzu-Yao Chiu¹, Julie D. Golomb¹; ¹Department of Psychology, The Ohio State University

26.414 Is trans-retinal integration exclusive to saccades?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Carolin Hübner¹ (carolin.huebner@hu-berlin.de), Martin Rolfs¹; ¹Department of Psychology, Humboldt-Universität zu Berlin

26.415 Robust and saccade-specific feature blanking effect for a wide range of spatial frequencies, sizes and eccentricities

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Lukasz Grzeczowski¹ (lukasz.grzeczowski@gmail.com), Arne Stein¹, Martin Rolfs¹; ¹Humboldt-Universität zu Berlin, Germany

26.416 Microsaccade rates reflect trial difficulty for perifoveal motion discrimination

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Rania Ezzo^{1,2} (rje257@nyu.edu), Bogeng Song¹, Bas Rokers^{1,2}, Marisa Carrasco¹; ¹New York University, ²New York University Abu Dhabi

26.417 The influence of task-irrelevant landmarks on spatiotopic localization and object-location binding

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Zitong Lu¹ (lu.2637@osu.edu), Julie D. Golomb¹; ¹Department of Psychology, The Ohio State University

26.418 Are smooth pursuit eye movements influenced by perceptual experience?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Loic Daumail¹ (loic.daumail@vanderbilt.edu), Zoe Armstrong¹, Frank Tong¹; ¹Vanderbilt University

26.419 The perceived motion of stimuli moving with, or opposite to, the direction of eye motion

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Josephine D'Angelo¹ (josephine_dangelo@berkeley.edu), Pavan Tiruveedhula¹, Raymond J. Weber², David W. Arathorn², Austin Roorda¹; ¹University of California, Berkeley, ²Montana State University

26.420 Serial dependence in Oculomotor inhibition uncovers stimulus predictability: what, where, and when

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Yahel Schwartz¹ (yahels222@gmail.com), Yoram Bonneh¹; ¹Bar-Ilan University, Ramat Gan, Israel

26.421 Motion prediction explains saccadic omission

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Eckart Zimmermann¹ (eckartzi@gmail.com), Antonella Pome¹; ¹University Düsseldorf

26.422 Eye Movements during Free Viewing and Scene Description are Similarly Directed to Objects Critical to Scene Understanding

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Shravan Murlidaran¹ (smurlidaran@ucsb.edu), Miguel P Eckstein¹; ¹University of California Santa Barbara

26.423 Sound-induced pupil dilation response reflects location in auditory space

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Hsin-I Liao¹ (hsini.liao.pb@hco.ntt.co.jp), Shimpei Yamagishi¹, Shigeto Furukawa¹; ¹NTT Communication Science Laboratories

Object Recognition: Reading

26.424 Can a gamified, rapid, online assessment of letter encoding ability in kindergarten and first grade children predict future reading development?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Mahalakshmi Ramamurthy¹ (maha10@stanford.edu), Adam Richie-Halford¹, Klint Kanopka¹, Andrea Hartsough², Katelyn Osuna¹, Maria Luisa Gorno-Tempini², Jason D Yeatman¹; ¹Developmental-behavioral Pediatrics, School of Medicine & Graduate School of Education, Stanford University, CA, USA., ²Weill Institute for Neurosciences, University of California, San Francisco, CA, USA.

26.425 Diverse reading themes for readability

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Tianyuan Cai¹, Aleena Niklaus¹, Michael Kralej¹, Bernard Kerr¹, Zoya Bylinskii¹; ¹Adobe Inc.

26.426 How reading acquisition changes the landscape of the function within the visual word form area

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jin Li¹ (li.9361@buckeyemail.osu.edu), Patricia Stefancin-Resnick¹, Zeynep Saygin¹; ¹The Ohio State University

26.427 Interacting effects of stimulus familiarity, attention and language in the visual word form area

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Vassiki Chauhan¹ (vchauhan@barnard.edu), Krystal McCook¹, Alex White¹; ¹Barnard College, Columbia University

26.428 Psychophysics of variable fonts: Gaze measures of reading efficiency

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Zainab Haseeb¹ (zainab.haseeb@mail.utoronto.ca), Silvia Guidi¹, Benjamin Wolfe¹, Anna Kosovicheva¹; ¹University of Toronto Mississauga

26.429 Psychophysics of variable fonts: Speed and comprehension measures

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Silvia Guidi¹ (s.guidi@mail.utoronto.ca), Zainab Haseeb¹, Anna Kosovicheva¹, Benjamin Wolfe¹; ¹University of Toronto Mississauga

26.430 RSVP reading speed varies two-fold across fonts, in inverse proportion to

crowding distance

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Denis G. Pelli¹ (denis.pelli@nyu.edu), Jan Kurzwaski¹, Augustin Burchell, Najib J. Majaj¹; ¹New York University

26.431 Semantically related Korean words can be processed in parallel

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Sang-Ah Yoo¹ (singahy@gmail.com), Sung Jun Joo¹; ¹Pusan National University

26.432 The spatiotemporal dynamics of letter processing in visual word recognition elucidated by random temporal sampling

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Martin Arguin^{1,2} (martin.argin@umontreal.ca), Simon Fortier-St-Pierre¹; ¹Universite de Montreal, ²Centre de recherche, Institut Universitaire de Gériatrie de Montréal

26.433 The visual word form area engages in processing Braille in expert visual readers

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Filippo Cerpelloni^{1,2} (filippo.cerpelloni@kuleuven.be), Alice Van Audenhaege¹, Ceren Battal¹, Remi Gau¹, Federica Falagiarda¹, Hans Op de Beeck^{2*}, Olivier Collignon^{1,3,4*}; ¹Institute of Psychology (IPSY) and Institute of Neuroscience (IoNS), University of Louvain, Belgium, ²Brain and Cognition, Leuven Brain Institute, KU Leuven, Belgium, ³Center for Mind/Brain Sciences (CIMeC), University of Trento, Italy, ⁴The Sense Innovation and Research Center, School of Health Sciences, HES-SO Valais-Wallis, Lausanne and Sion, Switzerland

26.434 Visual Word Recognition in Text Prediction Users and Non-Users

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Timurhan Djedilbaev¹, Maria Falikman; ¹Delft University of Technology, ²The University of the South

Binocular Vision: Disparity processing

26.436 Are crossed and uncrossed disparities processed by the same mechanism?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Penghan Wang¹, Alexandre Reynaud¹, Robert Hess¹; ¹McGill University

26.438 Global versus local internal disparity noise in stereovision

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jian Ding¹ (jian.ding@berkeley.edu), Hilary Lu¹, Kaiona Martinson¹, Eleanor Ball¹, Nicholette Touserani¹, Dennis Levi¹; ¹Herbert Wertheim School of Optometry, University of California, Berkeley

26.439 Stereopsis from interocular temporal delay: disentangling the effects of target versus background luminance

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Takahiro Doi¹ (takadoi@meta.com), Laurie Wilcox², T. Scott Murdison¹; ¹Reality Labs, Meta Platforms Inc.,

²Department of Psychology, Centre for Vision Research, York University, Toronto

26.440 Efficient Coding Predicts Changes in Motion-in-Depth Speed Judgements

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Lauren Murray¹ (l.n.murray@stir.ac.uk), Ross Goutcher¹; ¹University of Stirling

26.441 Characterizing frontoparallel stereoscopic motion by measuring duration thresholds

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Ignacio Serrano-Pedraza^{1,2} (iserrano@ucm.es), Ichasus Llamas-Cornejo¹; ¹Department of Experimental Psychology, Universidad Complutense de Madrid, Madrid, 28223, Spain, ²Centre for Behaviour and Evolution, Newcastle University, Newcastle upon Tyne, NE2 4HH, UK

3D: Cues and integration

26.442 A different point of view: The entrance pupil, not the nodal point, is the center of projection

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jacob Duijnhouwer¹, Kristina Uhlendorf¹, Gerrit W Maus¹, Jenny C A Read²; ¹Magic Leap, Inc., ²Newcastle University

26.443 The disparity gradient limit has limited relevance to natural environments

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Arleen Aksay¹ (aaksay@yorku.ca), Laurie M. Wilcox¹; ¹York University

26.444 Just-Noticeable Differences do not reflect depth cue uncertainty: Evidence from depth discrimination between motion and disparity stimuli

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jovan Kemp¹ (jovan_kemp@brown.edu), Fulvio Domini¹; ¹Brown University

26.445 A Prior for Convexity can Override the Rigidity Assumption in Structure-From-Motion

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Ryne Choi^{1,2} (ryne.choi@rutgers.edu), Jacob Feldman^{1,2}, Manish Singh^{1,2}; ¹Rutgers University, Department of Psychology, ²Rutgers University, Center for Cognitive Science

26.446 What changes after visuomotor training? Cue reweighting may in fact be cue recalibration

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Ailin Deng¹ (dengailin@gmail.com), Fulvio Domini²; ¹Brown University

Perception and Action

26.447 Action-response mode modulates go/no-go decision accuracy

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Philipp Kreyenmeier¹ (philipp.kreyenmeier@googlemail.com), Miriam Spering¹, Jolande Fookien²; ¹University of

British Columbia, Vancouver, Canada, ²Queen's University, Kingston, Canada

26.448 Motion intention is insufficient for serial temporal dependencies in a go/no-go process

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Mitra Taghizadeh Sarabi¹, Clara Fritz¹, Nadine Schlichting¹, Eckart Zimmermann¹; ¹Institute for Experimental Psychology, Heinrich Heine University Düsseldorf, Germany

26.449 Why does what you're moving affect how fast you search?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Emily M Crowe^{1,2} (e.m.crowe@vu.nl), Danai T Vorgia², Eli Brenner²; ¹University of Nottingham, ²Vrije Universiteit Amsterdam

26.450 Sensorimotor Synchronization to External and Imagined Visual Stimuli

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Fang Jiang¹ (fangj@unr.edu), Benjamin Sreenan¹, Simon Whitton¹; ¹UNR

26.451 Effects of motor preparation on category-specific representations in human cortex

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Canhuang Luo¹, Edward Ester¹; ¹University of Nevada, Reno

26.452 The influence of active tracing on shape representation in visual pathways

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Guy Baratz¹ (guybaratz@mail.tau.ac.il), Batel Buaron¹, Roy Mukamel¹; ¹Tel Aviv University

26.453 Visually guided (joint) action in a novel ball-and-beam task

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Marijn Hafkamp¹ (marijn.hafkamp@univ-amu.fr), Remy Casanova¹, Reinoud J. Bootsma¹; ¹Aix-Marseille University

26.454 Neural bases of attentional contexts that mediate visuomotor adaptation

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Hee Yeon Im¹ (heeyeon.im@ubc.ca), Joo-Hyun Song²; ¹University of British Columbia, ²Brown University

26.455 The locus of flanker congruency effects: Insights from Bayesian modelling and a choice reaching flanker task using random dot kinematograms.

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jordan Deakin¹, Alexander Daskalopoulos², Mukesh Makwana², Joo-Hyun Song², Dietmar Heinke¹; ¹University of Birmingham, ²Brown University

26.456 Intention as Hierarchical Constraints in Human Planning

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jingyin Zhu¹ (zhujiy@zju.edu.cn), Shaozhe Cheng¹, Tao Gao², Mowei Shen¹, Jifan Zhou¹; ¹Department of Human

Behavior and Psychological Sciences, Zhejiang University, ²Departments of Communication and Statistics, UCLA

26.457 A Simplified Model of Motor Control

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Kabir Arora^{1,2}, Samit Chakrabarty¹; ¹University of Leeds, Leeds, United Kingdom, ²Utrecht University, Utrecht, The Netherlands

26.458 Strong evidence against number adaptation

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Sami Yousif¹ (sryousif@sas.upenn.edu), Sam Clarke¹, Elizabeth Brannon¹; ¹University of Pennsylvania

Spatial Vision: Crowding and eccentricity

26.459 Metacognitive monitoring of the perceptual resolution across and around the visual field

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Cheongil Kim¹ (kimcheongil@gmail.com), Sang Chul Chong¹; ¹Yonsei University

26.460 Hemifield Asymmetries in Crowding

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Nicole L. Oppenheimer¹ (noppenhe@barnard.edu), Anishka Yerabothu¹, Alex L. White¹; ¹Barnard College, Columbia University

26.461 Exploring perceptual sensitivity and response bias in the visual periphery

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Joseph Pruitt¹ (josephpruitt@ufl.edu), Trevor Caruso¹, Brian Odegaard¹; ¹University of Florida

26.462 Does your old clutter measure spark joy?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Ruth Rosenholtz¹ (rruth@mit.edu); ¹NVIDIA, MIT

26.463 An enhanced Bouma model fits fifty people's visual crowding

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Jan Kurzwaski¹ (jan.kurzwaski@gmail.com), Najib Majaj², Jonathan Winawer³, Denis Pelli⁴; ¹New York University

26.464 Pop-out and crowding effect in adults with ADHD

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Hani Tsruya¹ (hanifrah75@gmail.com), Maria Lev, Uri Polat; ¹Bar ilan university

26.465 Interactions of crowding, overlap masking and surround suppression

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Susana Chung¹ (s.chung@berkeley.edu), Charles Ang¹, Daniel Coates²; ¹University of California, Berkeley, ²University of Houston

26.466 Cortical magnification, not summary statistics, explains information loss in

peripheral vision

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Rachel Heaton¹ (rmflood2@illinois.edu), John Hummel¹, Alejandro Lleras¹, Simona Buetti¹; ¹University of Illinois Urbana-Champaign

26.467 Does pre-microsaccadic remapping alter parafoveal crowding zones?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Krish Prahalad¹ (pskrishn@central.uh.edu), Daniel Coates¹; ¹University of Houston College of Optometry, Houston, TX, United States

26.468 Information compression determines the appearance of repeating patterns in peripheral vision

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Sabrina Hansmann-Roth¹, Bilge Sayim^{2,3}; ¹University of Iceland, ²Université de Lille, ³University of Bern

26.469 Can crowding distance be measured using standard letters in young children?

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Sarah J Waugh¹ (s.j.waugh@hud.ac.uk), Monika A Formankiewicz²; ¹University of Huddersfield, ²Anglia Ruskin University

26.470 Featural representation underlies performance differences around the visual field

Saturday, May 20, 2023, 2:45 – 6:45 pm, Pavilion

Shutian Xue¹ (shutian.xue@nyu.edu), Marisa Carrasco^{1,2}; ¹Department of Psychology, New York University, New York, United States, ²Center for Neural Science, New York University, New York, United States

Sunday Morning Posters in Banyan Breezeway

Attention: Spatial

33.301 Spatial attention alters BOLD activity and population receptive fields in visual cortex

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ekin Tünçok¹, Marisa Carrasco¹, Jonathan Winawer¹; ¹New York University

33.302 Assessing the Role of the Pulvinar in Feature versus Spatial Attention Control using Deep Neural Networks

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yun Liang¹ (yunliang@ufl.edu), Sreenivasan Meyyappan², Mingzhou Ding¹; ¹University of Florida, ²University of California, Davis

33.303 Visuospatial Attention and Discrimination of Oriented Gabor Patches in Children as a Function of Birth Experience

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ivy Chau¹ (ivychau@yorku.ca), Shir Bach-Kay¹, Audrey Wong-Kee-You², Scott Adler¹; ¹York University, ²Smith-Kettlewell Eye Institute

33.304 Effect of focused and distributed attention on stimulus representations in neural priority maps

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Amelia H. Harrison¹ (aharrison@ucsb.edu), Daniel D. Thayer¹, Thomas C. Sprague¹; ¹UC Santa Barbara

33.306 Measuring visual attention to online videos with a mouse cursor window paradigm: considerations for large scale data collection

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Karissa Payne¹ (karipayne@ksu.edu), Brian Howatt¹, Sahand Shaghagh², Lester Loschky¹; ¹Kansas State University, ²University of Waterloo

33.307 Visual attention flows downhill

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Alex Mitko¹ (amitko1@jh.edu), Jason Fischer¹; ¹Johns Hopkins University

33.308 Neural correlates of the effect of attention on surround suppression

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Merve Kiniklioğlu^{1,2} (mervekiniklioglu@gmail.com), Hüseyin Boyacı^{1,2,3,4}; ¹Interdisciplinary Neuroscience Program, Bilkent University, ²National Magnetic Resonance Research Center (UMRAM), Bilkent University, ³Department of Psychology, Bilkent University, ⁴Department of Psychology, J.L. Giessen University, Germany

33.309 Visual Statistical Learning of Attentional Distractors Persists Over Several Days

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Brooke Greiner¹ (bgreiner@mcw.edu), Gennadiy Gurariy¹, Christine Larson², Adam S. Greenberg¹; ¹Medical College of Wisconsin, ²University of Wisconsin-Milwaukee

33.310 Visual Spatial Attention Both Enhances and Suppresses Neuronal Responses in Visual Cortex

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Qiang Yang¹ (yang.qiang@ufl.edu), Sreenivasan Meeyappan², George R. Mangun², Mingzhou Ding¹; ¹University of Florida, ²University of California Davis

33.311 From human frontal eye fields to early visual cortex: Probing the role of feedback in presaccadic attention with Transcranial Magnetic Stimulation (TMS)

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nina Hanning^{1,2} (hanning.nina@gmail.com), Antonio Fernández¹, Marisa Carrasco¹; ¹New York University, ²Humboldt Universität zu Berlin

33.312 The joint contribution of statistical learning effects and bottom-up signals to the setting of attentional priorities

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Carola Dolci¹ (carola.dolci@univr.it), Einat Rashal², Suliann Ben-Hamed³, C. Nico Boehler², Emiliano Macaluso⁴, Leonardo Chelazzi¹, Elisa Santandrea¹; ¹University of Verona, ²University of Ghent, ³Institut des Sciences Cognitives Marc-Jeannerod, Lyon, France, ⁴Lyon Neuroscience Research Center, Lyon, France

Face Perception: Experience, learning, and expertise

33.313 Concealed familiar face detection with oculomotor measures and EEG in rapid serial visual presentation

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ivory Y. Chen¹, Aytaç Karabay¹, Sebastiaan Mathôt¹, Philipp K. Büchel¹, Robbert van der Mijl¹, Howard Bowman^{2,3}, Elkan G. Akyürek¹; ¹Department of Experimental Psychology, University of Groningen, Groningen, the Netherlands, ²School of Psychology, University of Birmingham, UK, ³School of Computing, University of Kent, UK

33.314 Real-world familiarization: Faces become familiar through short-term naturalistic exposure

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Menahal Latif¹ (menahal.latif@ryerson.ca), Margaret Moulson¹; ¹Toronto Metropolitan University

33.315 Designing an "Other Race Effect" test for forensic facial identification experts using the performance of deep networks and untrained humans.

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kate Marquis¹ (kate_marquis@yahoo.com), Selin Yavuzcan¹, Géraldine Jeckeln¹, Amy Yates², P. Jonathon Phillips², Alice O'Toole¹; ¹The University of Texas at Dallas, ²National Institute of Standards and Technology

33.316 The Role of Instructional Motivation and Stimulus Properties on Other-Race Effects

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Cindy M. Bukach¹ (cbukach@richmond.edu), Brianna Chalrton¹, Pascaline Munezero¹, Erin Huges¹, Natalie Benham¹, Patrick Sutphin¹, Maruti Mishra¹; ¹University of Richmond

33.317 Not the norm: Face likeness is not the same as similarity to familiar face prototypes.

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Benjamin Balas¹ (benjamin.balas@ndsu.edu), Adam Sandford², Kay Ritchie³; ¹North Dakota State University, ²University of Guelph-Humber, ³University of Lincoln

33.318 Scene context affects face discrimination

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Elissa Aminoff¹ (eaminoff@fordham.edu), Shira Baror²; ¹Fordham University, ²Hebrew University

33.319 Scene Previews Facilitate Face Detection Behavior

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Sule Tasliyurt Celebi¹ (sule.tasliyurt-celebi@psychol.uni-giessen.de), Benjamin de Haas^{1,2}, Katharina Dobs^{1,2};

¹Justus Liebig University of Giessen, ²Center for Mind, Brain and Behavior (CMBB), Marburg

33.320 The Effects of Horizontal Bias Training on Face Identification

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jamie G.E. Cochrane¹ (cochrj1@mcmaster.ca), Ali Hashemi¹, Anastasia Gaykalova¹, Kayla Mateus¹, Eugenie Roudaia², Allison B. Sekuler^{1,2,3}, Patrick J. Bennett¹; ¹Department of Psychology, Neuroscience & Behaviour, McMaster University, ²Rotman Research Institute, Baycrest, ³Department of Psychology, University of Toronto

33.321 Using Online Testing to Measure Spatial Frequency and Orientation Tuning in Face Processing

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Francis Gingras^{1,2} (francis.gingras16@gmail.com), Justin Duncan², Frédéric Gosselin³, Daniel Fiset², Caroline Blais²; ¹Université du Québec à Montréal, ²Université du Québec en Outaouais, ³Université de Montréal

33.322 What is the effective resolution of the retinal image of a distant face?

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Suayb S. Arslan¹ (sarslan@mit.edu), Michal Fux¹, Pawan Sinha¹; ¹Massachusetts Institute of Technology

33.323 An anatomically-constrained model of the primate visual system explains the inverted face effect as a function of expertise and suggests it arises at the level of V1

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Garrison Cottrell¹ (gary@ucsd.edu), Martha Gahl¹, Shubham Kulkarni¹, Alex Russell¹; ¹UCSD

Visual Search: Eye movements, attention, individual differences

33.324 Where's Waldo? Exploring Gaze Strategy in a Visual Search Task Online and In-Person

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Amy vanWell¹ (amyvanwell@gmail.com), James Tanaka¹; ¹University of Victoria

33.325 Visual Search Patterns in Cerebral Visual Impairment (CVI) Are Driven by Saliency Cues When Exploring Naturalistic Scenes

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Claire Manley¹ (cemanley@meei.harvard.edu), Kerri Walter², Peter Bex², Lotfi Merabet¹; ¹Mass. Eye and Ear, ²Northeastern University

33.326 Hard to ignore? Irrelevant distractors cannot be completely suppressed in a contextual cueing task.

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

M Pilar Aivar¹ (mariapilar.aivar@uam.es), Ricardo Rey-Sáez¹, Miguel A Vadillo¹; ¹Universidad Autónoma de Madrid (Madrid, Spain)

33.327 Salient targets don't catch your eye during extended field-of-view visual search

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Niklas Stein¹ (niklas.stein@uni-muenster.de), Tamara Watson², Maren Westendorf¹, Szonya Durant³, Markus Lappe¹; ¹University of Muenster, ²Western Sydney University, ³University of London

33.328 Sufficient eye movement coverage of the 2D image plane might mediate under-exploration in 3D search

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Devi Klein¹ (dklein@ucsb.edu), Miguel P. Eckstein¹; ¹UCSB

33.329 Expected Distractor Context Biases the Attentional Template for Target Shapes

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Maëlle Lerebourg¹ (maelle.lerebourg@donders.ru.nl), Floris de Lange¹, Marius V. Peelen¹; ¹Donders Institute for Brain, Cognition & Behaviour

33.330 How Blind is Inattentional Blindness in Mixed Hybrid search?

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ava Mitra¹, Jeremy Wolfe^{1,2}; ¹Brigham and Women's Hospital, ²Harvard Medical School

33.331 Carryover and spatial bias effects in Trail Making Test Part A sequential visual search

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Keith D. White^{1,2} (kdwhite@ufl.edu), Ben Chapin¹, Matthew Schiefer^{1,2}, John Williamson^{1,2}, Ira Fischler¹, Alexandra Campbell¹, Kenneth M. Heilman¹; ¹University of Florida, Gainesville, ²Brain Rehabilitation Research Center, NF/SG Veterans' Health System Medical Center, Gainesville FL

33.332 Probabilistic attentional selection during continuous visual search

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jennifer Magerl Fuller¹ (jcm3@hi.is), Vladislav Khvostov², Árni Kristjánsson³, Árni Gunnar Ásgeirsson⁴; ¹University of Iceland

33.333 Research on re-search: Foraging in the same patch twice

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Injae Hong¹ (ihong1@bwh.harvard.edu), Jeremy M. Wolfe^{1,2}; ¹Brigham & Women's Hospital, ²Harvard Medical School

33.334 Task design effects on negative search templates

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Michael Mugno¹ (mikemugno518@gmail.com), A. Caglar Tas¹; ¹University of Tennessee, Knoxville

33.335 How does color distribution learning affect oculomotor selection?

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Léa ENTZMANN¹ (leaentzmann@hi.is), Árni Gunnar Ásgeirsson², Árni Kristjánsson¹; ¹Icelandic Vision Lab, University of Iceland, ²University of Akureyri, Iceland

33.336 None to rule them all? No generalization of saliency models across age

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Christoph Strauch¹ (c.strauch@uu.nl), Alex J Hoogerbrugge¹, Gregor Baer¹, Ignace T C Hooge¹, Sjoerd M Stuit¹, Tanja C W Nijboer¹, Stefan Van der Stigchel¹; ¹Utrecht University

33.337 Impacts of Posttraumatic Stress Disorder on Eye-Movement during Visual Search in an Open Virtual Environment under High and Low Stress Conditions

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Leah Enders¹ (lenders@dcscorp.com), Heather Roy², Thomas Rohaly¹, Angela Jeter¹, Jessica Villarreal¹; ¹DCS Corp., Alexandria, VA USA, ²DEVCOM Army Research Laboratory, Aberdeen Proving Ground, MD USA

Attention: Cueing, inattention

33.338 When your ice-cream is looking somewhere: Gaze cueing from human faces and inanimate objects

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Maria Falikman¹, Tatiana Shevel²; ¹The University of The South, ²HSE University, Moscow

33.339 What do the inattentionally blind see? Evidence from 10,000 subjects

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Makaela Nartker¹, Chaz Firestone¹, Howard Egeth¹, Ian Phillips¹; ¹Johns Hopkins University

33.340 Adaptive control of attentional gating and visual awareness during the attentional blink

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Shuyao Wang¹ (shuyao.wang@rug.nl), Aytaç Karabay^{1,2}, Elkan G. Akyürek¹; ¹University of Groningen, ²New York University Abu Dhabi

33.341 Testing the Memory Encoding Cost Theory: A multiple cues experiment

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Chenxiao Guan¹ (chenxiaoguan@zju.edu.cn), Luo Chen¹, Huixing Song¹, Jian Li¹, Xiaoqi Huang¹, Mowei Shen¹, Hui Chen¹; ¹Zhejiang University

33.342 When should you warn the driver about the moose?: The effect of auditory cue timing on hazard localization in naturalistic videos

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jiali Song¹ (jiali.song11@gmail.com), Avery H. Chua¹, Meghna Patil¹, Anna Kosovicheva¹, Benjamin Wolfe¹; ¹University of Toronto Mississauga

33.343 Scotoma awareness: a novel protocol to induce fast development of a Preferred retinal locus (PRL) in patients with central vision loss

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Marcello Maniglia¹ (mmanig@ucr.edu), Jason Vice², Kristina Visscher², Aaron Seitz¹; ¹University of California, Riverside, ²University of Alabama at Birmingham,

33.344 Exploring the effects of visual cue complexity on foot placement accuracy in a targeted stepping task

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Benjamin Kissack¹ (bkissack@uoguelph.ca), Kate Fitzpatrick¹, Lori Ann Vallis¹; ¹University of Guelph, Department of Human Health and Nutritional Sciences

33.345 Do Audiovisual Semantic Congruency Effects Exist Without Visual Awareness?

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kun Zhou¹ (xiaofolanyang@gmail.com), Jan Drewes², Weina Zhu¹; ¹School of Information Science, Yunnan University, 650091 Kunming, China, ²Institute of Brain and Psychological Science, Sichuan Normal University, 610066 Chengdu, China

33.346 Near-space advantage in a simulated 3D environment: an inhibition of return (IOR) study

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Noah Britt¹ (brittn@mcmaster.ca), Hanna Haponenko¹, Hong-jin Sun¹; ¹McMaster University

33.347 Cold exposure enhances visual responses in human cortex

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Caitlin Gregory¹ (caitlingregory@ucsb.edu), Tom Bullock¹, Emily Machniak¹, Viktoriya Babenko¹, Michael Miller¹, Scott Grafton¹, Barry Giesbrecht¹; ¹UC Santa Barbara

33.348 Examining the Impact of Acetaminophen on Early Attentional Processing of Emotional Images

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Felicity Woodson¹ (fwoodson@tamu.edu), Ming-Ray Liao¹, Brian A. Anderson¹; ¹Texas A&M University

33.349 Predicting a Volitional Eye Movement Before a Visual Search: An Investigation of Overt Willed Attention

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

John Nadra^{1,2} (jnadra@ucdavis.edu), Jesse Bengson², Mingzhou Ding³, George Mangun^{1,2}; ¹University of California, Davis, ²Center for Mind and Brain, Davis, CA, ³University of Florida

33.350 The difference between social attention and non-social attention lies in attention disengagement rather than attention orientation

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Shengyuan Wang¹ (wangshy56@mail2.sysu.edu.cn), Yanhua Lin¹, Xiaowei Ding¹; ¹Sun Yat-sen University

33.351 A coactivation mechanism of goal-directed and stimulus-driven attentional control

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Zexuan Niu¹ (zexuan-niu@uiowa.edu), J. Toby Mordkoff¹, Andrew Hollingworth¹; ¹The University of Iowa, Department of Psychological and Brain Sciences

33.352 Are microsaccades biased similarly during external and internal shifts of covert attention?

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Freek van Ede¹ (freek.van.ede@vu.nl), Zampeta-Sofia Alexopoulou¹, Baiwei Liu¹; ¹Vrije Universiteit Amsterdam

33.353 The Vigilance Decrement is Not Only About Sensitivity

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Henri Etel Skinner¹ (henri@ucsb.edu), Isabel Ruacho¹, Barry Giesbrecht¹; ¹University of California Santa Barbara

33.354 Artificially quickening the moment of awareness alters the appearance of orientation repulsion

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Tomoya Nakamura^{1,2}, Ikuya Murakami¹; ¹Department of Psychology, The University of Tokyo, ²Japan Society for the Promotion of Science

33.355 The effect of alerting on cognitive control in the Simon task: An ERP study

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Dawa Dupont¹ (dd@psy.ku.dk), Signe Allerup Vangkilde¹, Anke Anseeuw², Anders Petersen¹; ¹University of Copenhagen, ²Gent University

Attention: Objects

33.356 Attention Response Functions During Multiple Object Tracking

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Marvin R. Maechler¹ (marvin.r.maechler.gr@dartmouth.edu), Patrick Cavanagh², Peter U. Tse¹; ¹Dartmouth College, ²Glendon College

33.357 Differential allocation of object-based attention across interhemispheric and intrahemispheric boundaries

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

David H. Hughes¹ (dhughes@mcw.edu), Adam J. Barnas², Adam S. Greenberg¹; ¹Joint Dept. of Biomedical Engineering at Marquette University and Medical College of Wisconsin, ²Dept. of Psychology, University of Florida

33.358 Object-based attention improves memory fidelity for unattended same-object stimulus, but at a cost to the attended stimulus

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Isabella DeStefano¹, Timothy Brady¹; ¹University of California San Diego

33.359 Object-based Attention Measured with SSVEPs

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Mohammad Shams-Ahmar¹ (m.shamsahmar@gmail.com), Peter Kohler¹, Patrick Cavanagh¹; ¹York University

33.360 Probing the neural plasticity of space- and object-based attentional processing

in childhood hemispherectomy

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Sophia Robert¹ (srobert@andrew.cmu.edu), Michael C. Granovetter^{1,2}, Marlene Behrmann^{2,1}; ¹Carnegie Mellon University, ²University of Pittsburgh

33.361 Repurposing the multiple object tracking task to assess individual differences in attention resource capacity

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Domenico Tullo¹ (dtullo@uci.edu), Christopher Neves², Jocelyn Faubert³, Armando Bertone⁴; ¹University of California, Irvine, ²Concordia University, ³Université de Montréal, ⁴McGill University

33.362 The influence of a moving object's location on object identity judgments

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Mengxin Ran¹ (ran.55@osu.edu), Zitong Lu¹, Julie D. Golomb¹; ¹Department of Psychology, The Ohio State University

33.363 Attentional tracking within and across visual hemifields and brain hemispheres.

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Piotr Styrkowiec^{1,2} (pstyrkowiec@uchicago.edu), Edward K. Vogel¹; ¹University of Chicago, US, ²University of Wroclaw, Poland

33.364 The more things change the more they stay the same: a continuously changing item can define a visual object

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Peter Mazalik¹ (pmazali1@jh.edu), Qihan Wu, Jonathan Flombaum, Justin Halberda; ¹Johns Hopkins

33.365 The Effect of Item Uniqueness on Multiple Object Tracking

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Rachel Eng¹ (engr@uoguelph.ca), Lana Trick¹; ¹University of Guelph

33.366 Modeling the dynamics of spreading attention in objects: Do transformers behave like humans?

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Hossein Adeli¹ (hossein.adelijelodar@gmail.com), Seoyoung Ahn¹, Nikolaus Kriegeskorte², Gregory Zelinsky¹; ¹Stony Brook University, ²Columbia University

33.367 How to ensure that animated data visualizations respect visual capacity limits

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ouxun Jiang¹ (ouxunjiang2026@u.northwestern.edu), Camillia Matuk², Steven Franconeri¹; ¹Northwestern University, ²New York University

33.368 Selective attention reconfigures the cortical extent of visual-semantic brain networks

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Emily Meschke¹ (emily_meschke@berkeley.edu), Jack Gallant¹; ¹University of California, Berkeley

33.370 Free gaze: co-recording of eye and head tracking with EEG to understand unconstrained vision

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Anna Madison^{1,2}, Chloe Callahan-Flintoft¹, Kennedy Nevling², Ashley Weidenbach², Haiden Moody², Anthony Ries^{1,2}; ¹DEVCOM, U.S. Army Research Laboratory, ²U.S. Air Force Academy

33.372 Multiple-object tracking (MOT) and visually guided actions: comparing change detection and localized touch to targets vs. distractors in MOT

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Mallory E. Terry¹ (terry@uoguelph.ca), Lana M. Trick²; ¹University of Guelph, Canada

Sunday Morning Posters in Pavilion

Perceptual Decision-Making

33.401 Using convolutional neural networks to relate external sensory features to internal decisional evidence

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Marshall Green¹ (marshall.l.green@outlook.com), Mingjia Hu², Rachel Denison³, Dobromir Rahnev¹; ¹Georgia Institute of Technology, ²Indiana University, ³Boston University

33.402 Competition between sensory and decisional biases in perceptual decision making

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Yi Gao¹ (yi.gao0525@outlook.com), Sixing Chen², Dobromir Rahnev¹; ¹Georgia Institute of Technology, ²Peking University

33.403 Brain signatures during perceptual decision-making index variations in internal processing and decision boundary

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Johan Nakuci¹ (jnakuci3@gatech.edu), Jason Samaha², Dobromir Rahnev¹; ¹Georgia Institute of Technology, ²University of California, Santa Cruz

33.404 Task-irrelevant perceptual priors are represented in decision making

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Tamás Kovács¹ (kovacs_tamas@phd.ceu.edu), Yiling Yang², Johanna Klon-Lipok³, Márton Hajnal⁴, Wolf Singer^{2,3,5}, Gergő Orbán⁴, Máté Lengyel^{1,6}; ¹Central European University, ²Ernst Strüngmann Institute for Neuroscience in Cooperation with Max Planck Society, ³Max Planck Institute for Brain Research, ⁴MTA Wigner Research Centre for Physics, ⁵Frankfurt Institute for Advanced Studies, ⁶University of Cambridge

33.405 Intact Bayesian perceptual decision making and metacognition in autism

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Laurina Fazioli¹ (laurina.fazioli@hotmail.fr), Bat-Sheva Hadad¹, Rachel Denison², Amit Yashar¹; ¹Department of Special Education, Haifa University, ²Department of Psychological & Brain Sciences, Boston University

33.406 A unifying theory explains seemingly contradicting biases in perceptual estimation

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Xue-Xin Wei¹, Michael Hahn²; ¹UT Austin, ²Stanford University

33.407 Stable perception or stable decisions? Disentangling the impact of perceptual and decisional stability on visual serial dependence

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Philippe Blondé¹ (philippe.blonde93@gmail.com), Alice Biryukov², David Pascucci², Árni Kristjánsson¹; ¹Icelandic Vision Lab, University of Iceland, ²Laboratory of Psychophysics, École Polytechnique Fédérale de Lausanne

33.408 Single-trial Diffusion Model estimates in perceptual decision-making with attentional modulation: Robustness and applications of basis-function parameter estimation

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Aaron Cochrane¹ (aaron.cochrane@unige.ch), Julia Föcker², Daphné Bavelier¹; ¹University of Geneva, ²University of Lincoln

33.409 Endogenous activity outside the target location in Area MT predicts perceptual sensitivity in behaving marmosets

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Zachary Davis¹ (zdavis@salk.edu), Lyle Muller², John Reynolds³; ¹The Salk Institute for Biological Studies 1 3, ²Western University 2

33.410 Trade-off between search costs and accuracy in a visual and manual search task

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Ilja Wagner¹ (ilja.wagner@psychol.uni-giessen.de), Jan Tünnermann², Anna Schubö², Alexander Schütz²; ¹Justus Liebig University Giessen (Germany), ²Experimental & Biological Psychology, University of Marburg (Germany)

33.411 How do people decide which graph will be informative?

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Holly Huey¹ (hhuey@ucsd.edu), Lauren A. Oey¹, Hannah S. Lloyd¹, Judith E. Fan¹; ¹University of California, San Diego

33.412 Neural mechanisms determining the duration of task-free, self-paced visual perception.

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Shira Baror^{1,2} (baror.shira@gmail.com), Thomas Baumgarten³, Biyu Jade He¹; ¹Neuroscience Institute, New York University School of Medicine, New York, NY, 10016, USA, ²Edmond and Lily Safra Center for Brain Sciences, Hebrew University of Jerusalem, Jerusalem 91904, Israel, ³Heinrich Heine University Düsseldorf, Germany

33.413 Estimating the planning complexity of visual subgoals

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Felix J Binder¹ (me@felixbinder.net), Marcelo G Mattar², David Kirsh¹, Judith E Fan³; ¹Cognitive Science Department, University of California San Diego, ²Psychology Department, New York University, ³Psychology Department, University of California San Diego

Color, Light and Materials: Surfaces, materials, constancy

33.414 Increment and decrement threshold vs. intensity curves for achromatic and L-cone tests.

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Yesenia Taveras-Cruz¹ (taverascruz.y@northeastern.edu), Aanya Sehgal¹, Rhea T. Eskew, Jr.¹; ¹Northeastern University

33.415 Color Calibration in Virtual Reality Using Different Head Mounted Displays

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Francisco Díaz Barrancas¹ (francisco.diaz-barrancas@psychol.uni-giessen.de), Raquel Gil Rodríguez¹, Avi Aizenman¹, Florian S. Bayer¹, Karl R. Gegenfurtner¹; ¹Department of Psychology. Justus-Liebig Universität, Germany

33.416 Towards latent representations of gloss in complex stimuli using unsupervised learning

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Julia Guerrero-Viu¹ (juliagviu@unizar.es), Ana Serrano¹, Belen Masia¹, Diego Gutierrez¹; ¹Universidad de Zaragoza, I3A

33.417 Taking A Hands-On Approach: Active Explorations In Visual Material Perception

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Lisa P. Y. Lin¹ (pui.lin@psychol.uni-giessen.de), Knut Drewing¹, Katja Dörschner¹; ¹Justus-Liebig-Universität Giessen

33.418 A large-scale measurement of human gloss judgments revealed highly consistent and systematic failures of gloss constancy

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Takuma Morimoto^{1,2} (takuma.morimoto@psy.ox.ac.uk), Arash Akbarinia¹, Katherine Storrs³, Jacob R. Cheeseman¹, Hannah E. Smithson², Karl R. Gegenfurtner¹, Roland W. Fleming¹; ¹Department of Psychology, Justus-Liebig-Universität Gießen, Germany, ²Department of Experimental Psychology, University of Oxford, UK, ³School of Psychology, University of Auckland, New Zealand

33.419 Vagueness and Volume: blurred contours and the perception of depth in images

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Jeroen Stumpel¹ (j.f.h.j.stumpel@uu.nl), Maarten Wijntjes, Robert Volcic; ¹Utrecht University/ TU Delft, ²TU Delft,

33.420 The warm-cool color dimension aligns with asymmetries in color perception implicit in uniform color spaces

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Jake Manalansan¹, Michael Webster¹; ¹University of Nevada Reno

33.421 Measuring memory colour under metameric illuminations

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Yesesvi Konakanchi¹, Yunyang Shi², Anya Hurlbert¹; ¹Newcastle University, UK, ²Southeast University, China

33.423 Perceiving Surface Color Requires Attention

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Erin Goddard¹ (erin.goddard@unsw.edu.au), Kavita Paul Remician¹; ¹UNSW

Object Recognition: Neural organization and representations

33.424 Validity of neural distance measures in representational similarity analysis

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Fabian Soto¹ (fasoto@fiu.edu); ¹Florida International University

33.425 cneuromod-things : a large-scale fMRI dataset for task- and data-driven assessment of object representation and visual memory recognition in the human brain

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Marie St-Laurent^{1,2} (marie.stl@gmail.com), Basile Pinsard¹, Oliver Contier^{2,3}, Katja Seeliger², Valentina Borghesani^{1,4}, Julie Boyle¹, Pierre Bellec^{1,5}, Martin Hebart^{2,6}; ¹Centre de recherche de l'Institut universitaire de gériatrie de Montréal, Canada, ²Vision and Computational Cognition Group, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, ³Max Planck School of Cognition, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, ⁴Faculty of Psychology and Educational Sciences, Université de Genève, Genève, ⁵Université de Montréal, Canada, ⁶Department of Medicine, Justus Liebig University Giessen, Germany

33.426 The functional profile of the ventrotemporal cortex to high-level vision, language, and attention

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Kelly J. Hiersche¹ (hiersche.1@buckeyemail.osu.edu), Jin Li¹, Zeynep M Saygin¹; ¹The Ohio State University

33.427 A cortical surface template for human neuroscience

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Ma Feilong¹ (feilong.ma@dartmouth.edu), Guo Jiahui¹, M. Ida Gobbini², James V. Haxby¹; ¹Dartmouth College, ²Università di Bologna

33.428 Representations of real objects and pictures in the dorsal and ventral visual streams differ based on physical stimulus distance

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Grant Fairchild¹ (grant.t.fairchild@gmail.com), Desiree Holler¹, Sara Fabbri¹, Michael Gomez¹, Jacqueline Snow¹;

¹University of Nevada, Reno

33.429 Cross-movie prediction of individualized functional topography

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Guo Jiahui¹ (jiahui.guo@dartmouth.edu), Ma Feilong¹, Samuel A. Nastase², James V. Haxby¹, M. Ida Gobbini³;

¹Dartmouth College, ²Princeton University, ³Università di Bologna

33.431 The dynamics of object coding within and across the hemispheres

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Amanda K. Robinson^{1,2} (a.robinson4@uq.edu.au), Tijn Grootswagers³, Sophia M. Shatek², Marlene Behrmann⁴, Thomas A. Carlson²; ¹Queensland Brain Institute, The University of Queensland, ²School of Psychology, The University of Sydney, ³The MARCS Institute for Brain, Behaviour and Development, Western Sydney University, ⁴Department of Ophthalmology, University of Pittsburgh

Object Recognition: Visual preference, features and objects

33.432 Upper visual field advantage in object detection.

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Shuma Tsurumi^{1,2} (perry.super178@gmail.com), Jun Kawahara¹; ¹Hokkaido University, ²Chuo University

33.433 Multisensory Learning of 3-D Novel Objects

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Hellen Kyler¹ (hkyler@iu.edu), Karin James²; ¹Indiana University

33.434 Unequal contributions of color and shape to object identification in primates

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

James Cavanaugh¹, Alexis C. R. Green¹, Bevil R. Conway¹; ¹Laboratory for Sensorimotor Research / NEI / NIH

33.435 Determinants of Canonical Forms in Memory Storage and Object Recognition

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Dongcheng He¹ (dongcheng.he@du.edu), Haluk Ogmen¹; ¹University of Denver

33.436 Asymmetries in fine spatial vision and cone density within the foveola

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Samantha K. Jenks^{1,2} (sjenks8@ur.rochester.edu), Jenny L. Witten³, Benjamin Moon^{2,4}, Ashley M. Clark^{1,2}, Sanjana Kapisthalam^{1,2}, Wolf M. Harmening³, Martina Poletti^{1,2,5}; ¹Department of Brain and Cognitive Sciences, University of Rochester, Rochester, NY, USA, ²Center for Visual Science, University of Rochester, Rochester, NY, USA, ³Department of Ophthalmology, Rheinische Friedrich-Wilhelms-Universität Bonn, Ernst-Abbe-Str. 2, Bonn 53127, Germany, ⁴Institute of Optics, University of Rochester, Rochester, NY, USA, ⁵Department of Neuroscience, University of Rochester, Rochester, NY, USA

Eye Movements: Saccades and pursuit

33.437 Posterior parietal cortex damage causes endpoint biases relative to the visual target during anti-saccades

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Julie Ouerfelli-Ethier^{1,2}, Romain Fournet¹, Laure Pisella², Aarlenne Khan¹; ¹University of Montreal, ²Lyon Neuroscience Research Center, Trajectoires team

33.438 Saccades alter cortical network modularity and decrease lateralization in a visual perception task

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Amirhossein Ghaderi^{1,2} (ghaderi@yorku.ca), Matthias Niemeier^{3,1,2}, John Douglas Crawford^{1,2,4,5,6}; ¹Centre for Vision Research, York University, Toronto, ON, Canada, ²Vision Science to Applications (VISTA) Program, York University, Toronto, ON, Canada, ³Department of Psychology, University of Toronto Scarborough, Toronto, ON, Canada, ⁴Department of Biology, York University, Toronto, ON, Canada, ⁵Department of Kinesiology and Health Sciences, Toronto, ON, Canada, ⁶Department of Psychology, York University, Toronto, ON, Canada

33.439 Serial dependence during saccades is mediated by alpha rhythms

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Chiara Terzo¹ (chiaraterzo95@gmail.com), Giacomo Ranieri¹, Xinyu Xe², David Charles Burr¹, Maria Concetta Morrone³; ¹University of Florence, Florence, Italy, ²East China Normal University, Shanghai, China, ³University of Pisa, Pisa, Italy

33.440 Saccadic adaptation changes perception of the saccade target object

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Jessica Parker¹ (jparke87@vols.utk.edu), Madeline Embrey¹, A. Caglar Tas¹; ¹University of Tennessee, Knoxville

33.441 Does visual uncertainty influence saccadic adaptation?

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Matteo Lisi¹, Joshua Solomon², Michael Morgan²; ¹Royal Holloway, University of London, ²City, University of London

33.442 Adaptive changes to saccade amplitude and target localization induced only by post-saccadic feedback

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Frauke Heins^{1,2} (frauke.heins@uni-muenster.de), Jana Masselink^{1,2}, Joshua-Nikodemus Scherer¹, Markus Lappe^{1,2}; ¹University of Muenster, ²Otto-Creutzfeldt Center for Cognitive and Behavioral Neuroscience

33.443 A comparison of the temporal dynamics of pre-saccadic and pre-microsaccadic vision

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Zoe Stearns^{1,2} (zstearn2@ur.rochester.edu), Martina Poletti^{1,2}; ¹University of Rochester, ²Center for Visual Science

33.444 Influence of reward on saccadic vigor and pre-saccadic attention

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Oliver L. Steiner¹ (oliverr.e.steiner@hotmail.de), Lukasz Grzeczowski¹, Madeleine Gross², Martin Rolfs¹;

¹Department of Psychology, Humboldt-Universität zu Berlin, Germany, ²Psychological and Brain Science Department, University of California, Santa Barbara, CA, USA

33.445 Smooth pursuit eye movements incorporate the knowledge of Newtonian mechanics and other cues for motion prediction

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Jie Z. Wang¹ (jwang255@ur.rochester.edu), Abdul-Rahim Deeb², Fulvio Domini², Eileen Kowler³; ¹University of Rochester, ²Brown University, ³Rutgers University - New Brunswick

33.446 Inability to pursue non-rigid motion produces instability of spatial perception

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Krischan Koerfer¹ (krischan.koerfer@uni-muenster.de), Tamara Watson², Markus Lappe¹; ¹University of Muenster, ²Western Sydney University

33.447 Representation of an object through visual occlusion

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Austin Behel¹, Lina Teichmann¹, Grace Edwards¹, Chris Baker¹; ¹NIMH/NIH

Spatial Vision: Neural mechanisms

33.448 Pupil-linked arousal modulates precision of representation in cortex

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Laura Geurts¹ (l.geurts@donders.ru.nl), Janneke Jehee¹; ¹Donders Institute for Brain, Cognition and Behaviour, Radboud University

33.449 Spatial Tuning of Alpha Oscillations in Human Visual Cortex

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Kenichi Yuasa¹ (ky689@nyu.edu), Iris Groen², Giovanni Piantoni³, Stephanie Montenegro⁴, Adeen Flinker⁴, Sasha Devore⁴, Orrin Devinsky⁴, Werner Doyle⁴, Patricia Dugan⁴, Daniel Friedman⁴, Nick Ramsey³, Natalia Petridou³, Jonathan Winawer¹; ¹New York University, ²University of Amsterdam, ³University Medical Center Utrecht, ⁴New York University School of Medicine

33.450 Anodal tDCS alters appearance

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Sang Wook Hong^{1,2} (shong6@fau.edu), Yosun Yoon^{1,2}; ¹Department of Psychology, Florida Atlantic University, ²Stiles-Nicholson Brain Institute, Florida Atlantic University

33.451 Improving the reliability and accuracy of population receptive field measures using a "log-bar" stimulus

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Kelly Chang¹ (kchang4@uw.edu), Ione Fine¹, Geoffrey Boynton¹; ¹Department of Psychology, University of Washington, Seattle

33.452 Evidence for high-level processing in a Ponzo-like size illusion

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Ecem Altan¹, Huseyin Boyaci^{2,3}, D. Samuel Schwarzkopf^{1,4}; ¹University of Auckland, New Zealand, ²Bilkent University, Turkey, ³University of Giessen, Germany, ⁴University College London, United Kingdom

33.453 Simple, automatized and reproducible pRF analysis

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

David Linhardt¹ (david.linhardt@meduniwien.ac.at), Christian Windischberger¹, Pedro Paz-Alonso², Garikoitz Lerma-Usabiaga²; ¹Medical University of Vienna, Austria, ²Basque Center on Cognition, Brain & Language, San Sebastián, Spain

33.454 Orientation-tuned normalization modulates the gain of visuocortical contrast responses in humans

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Michaela Klimova¹, Ilona M. Bloem², Sam Ling¹; ¹Boston University, ²New York University

33.455 Characterizing the relationship between population spatial frequency tuning and receptive field size

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Emily Wiecek^{1,2,3} (emily.wiecek@childrens.harvard.edu), Luis D. Ramirez³, Michaela Klimova³, Sam Ling³; ¹Boston Children's Hospital, ²Harvard Medical School, ³Boston University

33.456 Comparison of the visual discharge properties of primate superior colliculus and primary visual cortex neurons

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Yue Yu¹ (yue.yu@uni-tuebingen.de), Amarender Bogadhi¹, Ziad Hafed¹; ¹University of Tuebingen

33.457 Larger area size, not increased number, better explains expansion of human visual cortex

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Emily Meyer¹, Michael Arcaro¹; ¹University of Pennsylvania

33.458 Compressive spatiotemporal summation predicts simultaneous suppression in human visual cortex

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Eline R Kupers¹ (ekupers@stanford.edu), Insub Kim¹, Kalanit Grill-Spector¹; ¹Stanford University

33.459 The impact of noise correlations on the information contained in visual cortical activity

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

James R.H. Cooke¹, Janneke F.M. Jehee¹; ¹Donders Institute for Brain, Cognition and Behavior

33.460 Strong radial bias, but no evidence of oblique effect from high-resolution data in primary visual cortex

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Qi Chen¹, Karen Navarro², Cheryl Olman³; ¹University of Minnesota

33.461 Retinotopic connectivity maps are robust to large eye movements and optical blur

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

D. Samuel Schwarzkopf^{1,2} (s.schwarzkopf@auckland.ac.nz), Gene T. Tangtharakul¹, Catherine A. Morgan¹, Simon K. Rushton³; ¹University of Auckland, New Zealand, ²University College London, ³Cardiff University, Wales

33.462 Population receptive field properties change dynamically within milliseconds

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Katharina Eickhoff^{1,2,3}, Arjan Hillebrand⁴, Maartje C. de Jong^{1,2,5}, Serge O. Dumoulin^{1,2,3,6}; ¹Spinoza Centre for Neuroimaging, Amsterdam, the Netherlands, ²Netherlands Institute for Neuroscience, Amsterdam, the Netherlands, ³Vrije Universiteit, Amsterdam, the Netherlands, ⁴Department of Clinical Neurophysiology and Magnetoencephalography Centre, Amsterdam UMC, the Netherlands, ⁵University of Amsterdam, the Netherlands, ⁶Utrecht University, the Netherlands

33.463 Laplacian reference is optimal for steady-state visual evoked potentials

Sunday, May 21, 2023, 8:30 am – 12:30 pm, Pavilion

Yuan Zhang¹ (zhanglhm@163.com), Matteo Valsecchi², Karl Gegenfurtner³, Jing Chen¹; ¹Shanghai University of Sports, ²Università di Bologna, ³Justus-Liebig-Universität Gießen

Sunday Afternoon Posters in Banyan Breezeway

Development: Neural mechanisms and eye movements

36.301 The HEALTHy Brain and Child Development (HBCD) Study: Relevance to the Vision Sciences Community

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Lisa S. Scott¹ (lscott@ufl.edu), Maeve R. Boylan¹, Jens T. Rosenberg¹, Andreas Keil¹, Sara B. DeMauro²; ¹University of Florida, ²Children's Hospital of Philadelphia

36.302 ASSESSING THE RELIABILITY OF ERP, SSVEP, AND OSCILLATORY DATA METHODOLOGY FOR VISUAL PARADIGMS IN INFANT EEG

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Maeve R. Boylan¹ (mboylan@ufl.edu), Jessica Sanches Braga Figueria¹, Mina Elhamiasl¹, Isabela da Silva Andrade¹, Ryan Barry-Anwar¹, Andreas Keil¹, Lisa S. Scott¹; ¹University of Florida

36.303 Brain Responses to Symmetry during Early Infancy

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Peter J. Kohler¹ (pjkohler@yorku.ca), Shaya Samet¹, Yara Iskandar¹, Lara Pierce¹; ¹York University, Toronto, ON,

Canada

36.304 Neural mechanisms of surface feature label learning in early childhood

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Alexis McCraw¹ (amccraw@vols.utk.edu), Kara Lowery¹, Rachel Eddings¹, Jacqueline Sullivan¹, Hollis Heim¹, Aaron Buss¹; ¹University of Tennessee

36.305 Strobe-rearing preserves motion selectivity but disrupts direction selectivity in macaque area MT

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Saloni Sharma¹, Michael Arcaro², Margaret Livingstone¹; ¹Harvard Medical School, ²University of Pennsylvania

36.307 Youth is not wasted on the young: Late-in-life sight restoration in congenitally blind children leads to the emergence of some visual constructional skills but not others

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sharon Gilad-Gutnick¹ (sharongu@mit.edu), Pragya Shah², Priti Gupta³, Mrinalini Yadav², Chetan Ralekar¹, Dhun Verma², Umang Mathur⁴, Suma Ganesh⁴, Pawan Sinha¹; ¹Massachusetts Institute of Technology, ²Project Prakash, ³IIT-Delhi, ⁴Shroff Charitable Eye Hospital

36.308 Experience is required to develop visual-nonvisual multisensory integration capabilities

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Barry Stein¹ (bestein@wakehealth.edu), Benjamin Rowland¹; ¹Wake Forest School of Medicine

36.309 The building blocks of vision: evidence for a hierarchical, retinotopic organization in the human neonate brain

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Michael Arcaro¹; ¹University of Pennsylvania

36.310 Development of Peak Alpha Frequency During Infancy

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Mina Elhamias¹ (melhamiasl@ufl.edu), Jessica Sanches Braga Figueira¹, Ryan Barry-Anwar¹, Andreas Keil¹, Lisa S. Scott¹; ¹University of Florida

36.311 Phonemic Discrimination and Eye Movements in Infants

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Shir Kay¹ (shirkay4@yorku.ca), Scott A. Adler¹; ¹York University

36.312 Perspective matters: the role of scene point of view on infants' looking strategies

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Christian Nelson¹ (chnelson@ucdavis.edu), Taylor Hayes¹, John Henderson¹, Lisa Oakes¹; ¹University of California, Davis

36.313 The Distribution of Gaze Positions of Human Infants in Natural Behavior

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

T Rowan Candy¹ (rcandy@indiana.edu), Adam Dalessandro¹, Victoria Tellez¹, Stephanie Biehn¹, Clara Mestre¹, Taylor Haaff¹, Kathryn Bonnen¹, Linda Smith¹; ¹Indiana University

Eye Movements: Visual Impairment

36.314 Altered eye movements during reading under various types of visual field defects

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Haojue Yu¹ (yu.haoj@northeastern.edu), MiYoung Kwon¹; ¹Northeastern University

36.315 Consistency of the PRL Across Vergence Demand as a Measure of Objective Fixation Disparity

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Norick R. Bowers^{1,2} (norick.bowers@psychol.uni-giessen.de), Susana T. L. Chung², Martin S. Banks², Austin Roorda²; ¹Justus Liebig Universität Gießen, ²University of California Berkeley, Herbert Wertheim School of Optometry & Vision Science

36.316 Eye-tracking to quantify visual function in individuals with vision impairment: A systematic review

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Ward Nieboer¹ (wardnieboer@gmail.com), Andrea Ghiani¹, Ralph de Vries¹, Eli Brenner¹, David Mann¹; ¹Vrije Universiteit Amsterdam

36.317 Flicker Impairs Reading Speed: Impacts on the Visually Sensitive

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sarah M Haigh¹ (shaigh@unr.edu), Caitlin A Laycox¹, Lauren Thompson², Jasmine A Haggerty¹, Arnold J Wilkins³; ¹University of Nevada, Reno, ²Vassar College, ³University of Essex

36.318 Changes in eye condition using eye movement training application

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Hyungoo Kang^{1,2} (hgkang@cku.ac.kr), Sejoon Moon², Kyunghyun Park¹, Ji Hye Kim¹, Ji Won Lee¹, Minji Gil², Ye Jin Jang², beom jun Kim², Sang-il Park^{1,2}; ¹Dept. of Optometry, Catholic Kwandong Univ., ²Dept. of Biomedical engineering, Catholic Kwandong Univ.

Motion: Local, in depth

36.319 Retinal Slip from Self Motion Modulates the Perceptibility of Jitter in World-Locked Augmented Reality

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Hope Lutwak^{1,2} (hl1239@nyu.edu), T. Scott Murdison¹, Kevin W. Rio¹; ¹Reality Labs, Meta Platforms Inc., ²New York University

36.320 Frame induced position shifts extend outside the frame in space but not in time

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

B. Marius 't Hart¹ (thartbm@gmail.com), Patrick Cavanagh^{1,2,3}; ¹Centre for Vision Research, York University, Toronto, ON, Canada, ²Department of Psychology, Glendon College, Toronto, ON, Canada, ³Department of Psychological and Brain Sciences, Dartmouth College, Hanover, NH, USA

36.321 The effects of stimulus size and auditory input on speed perception

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Gözde Şentürk¹, İnci Eke¹, Emin Kılıç¹; ¹Middle East Technical University, Northern Cyprus Campus, Psychology Program

36.322 Trajectory Estimation in Amblyopia

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Ziad Lamlili El Mazoui Nadori¹ (ziad.lamlilielmazouinadouri@mail.mcgill.ca), Alexandre Reynaud²; ¹First Year Medical Student, McGill University, ²Ophthalmology & Visual Sciences, McGill Vision Research

36.323 Effects of Local and Global Cues on Oculomotor and Perceived of Movement

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Joonsik Moon¹ (moon.joo@northeastern.edu), Peter Bex¹; ¹Northeastern University

36.324 Correlation between perceived size and depth changes in the Dynamic Ebbinghaus illusion

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Saki Takao^{1,2} (sakitakao76@gmail.com), Katsumi Watanabe², Patrick Cavanagh¹; ¹Glendon College of York University, ²Waseda University

36.325 Height-in-Field Cues Affect Motion-in-Depth Speed Discrimination

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Ross Goutcher¹ (ross.goutcher@stir.ac.uk), Lauren Murray¹; ¹University of Stirling

36.326 Single-trial fMRI decoding of 3D motion based on stereoscopic and perspective cues

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Puti Wen² (pw1246@nyu.edu), Michael Landy¹, Bas Rokers^{1,2}; ¹New York University, ²New York University Abu Dhabi

36.327 Introspective inference counteracts perceptual distortion

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Andra Mihali¹ (alm652@nyu.edu), Marianne Broeker, Florian Ragalmuto, Guillermo Horga; ¹Columbia University, ²University of Oxford, ³Vrije Universiteit Amsterdam, ⁴New York State Psychiatric Institute

36.328 ZOOM: a robust and more accurate adaptive procedure to quantify perception

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Julien Audiffren¹ (julien.audiffren@unifr.ch), Jean Pierre Bresciani¹; ¹University of Fribourg

36.329 The effect of tobacco use on performance in a structure-from-motion task among patients with psychotic psychopathology.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Kyle W. Killebrew¹ (kkillebr@umn.edu), Hannah R. Moser¹, Andrea Grant², Scott R. Sponheim^{1,3}, Justin Anker¹, Micheal-Paul Schallmo¹; ¹Department of Psychiatry and Behavioral Sciences, University of Minnesota, ²Center for Magnetic Resonance Research, University of Minnesota, ³Veterans Affairs Medical Center, Minneapolis, MN

Attention: Individual differences

36.330 Inter-individual variations in internal noise correlate with visual attention but not with post-perceptual processes

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Felipe Luzardo¹ (felipedavidluzardo@gmail.com), Yaffa Yeshurun¹; ¹University of Haifa

36.331 Autistic group differences in social attention are magnified by real-world perceptual and linguistic features

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Amanda J Haskins¹ (ajh.gr@dartmouth.edu), Jeff Mentch², Thomas L. Botch¹, Brenda D. Garcia¹, Alexandra L. Burrows¹, Caroline E. Robertson¹; ¹Dartmouth College, ²Harvard University

36.332 Characterizing the consistency and malleability of sustained attention performance

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Anna Corriveau¹, Anthony James Jr.¹, Monica D. Rosenberg¹; ¹University of Chicago

36.333 Reliability of Individual Difference Measures of Target Enhancement and Distractor Suppression

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Natalia Khodayari¹ (nkhodayari@jhu.edu), Howard Egeth¹, Susan Courtney¹; ¹Johns Hopkins University

36.334 Stability of Individual Differences in Implicitly Guided Attention

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Chen Chen¹ (chen5954@umn.edu), Vanessa G. Lee¹; ¹University of Minnesota

36.335 Stable individual differences in gaze behavior reflect unique conceptual priority maps

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Katherine Packard¹, Amanda J. Haskins¹, Caroline E. Robertson¹; ¹Dartmouth College

36.336 Filtering of visual distractors in schizophrenia: Diminished attentional control predicts behavioral deficits

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Scott Sponheim^{1,2} (sponh001@umn.edu), Peter Lynn²; ¹Minneapolis VA Health Care System, ²University of Minnesota, Twin Cities

36.337 Use of facial expressions to estimate level of attention while watching video lectures.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Renjun miao^{1,2} (miaorenjun@gmail.com), Haruka Kato¹, Yasuhiro Hatori¹, Yoshiyuki Sato¹, Satoshi Shioiri¹;
¹TOHOKU UNIVERSITY, ²POPER

Visual Working Memory: Interference

36.338 Can items in visual working memory be shielded from visual interference while in use?

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Eva Lout¹ (lout.2@osu.edu), Blaire Dube¹, Julie D. Golomb¹; ¹The Ohio State University

36.339 Differently prioritized working memory items are differently protected from perceptual interference.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Koeun Jung¹ (jungke1225@gmail.com), Suk Won Han¹, Yoonki Min¹; ¹Chungnam National University

36.342 Spontaneous detection of Visual Working Memory failures and subsequent performance recovery

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Olga Kozlova¹ (olga.kozlova@mail.utoronto.ca), Keisuke Fukuda^{1,2}; ¹University of Toronto Mississauga, ²University of Toronto

36.343 The effect of masking on visual working memory pointer-system

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Shani Friedman¹ (shanibuch@gmail.com), Roy Luria²; ¹Tel-Aviv University

36.344 Verbal interference with visual working memory

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Andreea-Maria Gui^{1,2}, Joana Pereira Seabra^{1,2}, Thomas B. Christophel^{1,2}; ¹Bernstein Center for Computational Neuroscience Berlin, Germany, ²Humboldt-Universität zu Berlin, Germany

36.345 When can working memory consolidation be interrupted?

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Brandon Carlos¹ (bjcarlos@uh.edu), Benjamin Tamber-Rosenau¹; ¹University of Houston

36.346 Working memory is robust to distractors but not sensory uncertainty

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Holly Kular¹ (hkular@ucsd.edu), Kirsten Adam¹, John Serences¹; ¹University of California San Diego

36.347 Neural encoding and dynamics of visual working memory during distraction

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Jonas Karolis Degutis^{1,2} (j.karolis.degutis@maxplanckschools.de), Joram Soch^{1,3}, Simon Weber^{1,4}, John-Dylan Haynes^{1,2,4,5}; ¹Charité Universitätsmedizin Berlin, ²Max Planck School of Cognition, ³German Center for Neurodegenerative Diseases, ⁴Humboldt-Universität zu Berlin, ⁵Technische Universität Dresden

36.348 Inter-item competition during encoding and maintenance

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Janna Wennberg¹ (jwennber@ucsd.edu), John Serences¹; ¹University of California, San Diego

36.349 Event Working Memory Selectively Impairs Dynamic Tracking

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Qi Gao¹ (qi.gao@zju.edu.cn), Xiaochi Ma¹, Mowei Shen¹, Zaifeng Gao¹; ¹Zhejiang University

36.350 Naturalistic visual input during the working memory delay reduces microsaccades but increases recall error

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Amit Rawal^{1,2} (amitrawal1643@gmail.com), Rosanne L. Rademaker¹; ¹Ernst Strüngmann Institute (ESI) for Neuroscience in Cooperation with the Max Planck Society, Frankfurt, Germany, ²Vrije Universiteit Amsterdam

36.351 Working memory representations modulate the magnitude of the similarity-induced memory bias

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Nursima Ünver¹ (nursima.unver@mail.utoronto.ca), Rosanne Rademaker², Keisuke Fukuda^{1,3}; ¹University of Toronto, Toronto, Canada, ²Ernst Strüngmann Institute for Neuroscience, Max Planck Society, Frankfurt, Germany, ³University of Toronto Mississauga, Toronto, Canada

Visual Working Memory: Attention, load and capacity

36.353 Investigating visual working memory capacity using a highly reliable change localization task

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Temilade Adekoya¹ (tyadekoya@uchicago.edu), Chong Zhao², Edward Vogel³, Edward Awh⁴; ¹University of Chicago

36.354 The Effects of Physical Effort on Working Memory Encoding

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Li Yang¹ (lyang147@ucr.edu), Hyung-Bum Park¹, Weiwei Zhang¹; ¹University of California, Riverside

36.355 The Impact of Visual Working Memory Chunking on Visual Search

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Logan Doyle¹ (logan.doyle@mail.utoronto.ca), Susanne Ferber²; ¹University of Toronto

36.356 Working Memory Precision Under Physical Effort

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Lilian Azer¹ (lazer001@ucr.edu), Weiwei Zhang¹; ¹University of California, Riverside

36.357 Unimodal load selectively reduces recruitment of sensory cortices for working memory storage

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Vivien Chopurian^{1,2,3} (vivien.chopurian@bccn-berlin.de), Simon Weber^{1,2,3}, Thomas Christophel^{1,2,3}; ¹Humboldt University of Berlin, ²Bernstein Center for Computational Neuroscience Berlin, ³Berlin Center for Advanced Neuroimaging

36.358 Focusing attention in long-term and working memory improves recall and guides perception

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Dongyu Gong^{1,2} (dongyu.gong@new.ox.ac.uk), Dejan Draschkow^{1,2}, Anna C. Nobre^{1,2}; ¹Oxford Centre for Human Brain Activity, Wellcome Centre for Integrative Neuroimaging, University of Oxford, UK, ²Department of Experimental Psychology, University of Oxford, UK

36.359 Univariate and multivariate load-dependent signals in human cortex

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Kirsten Adam¹ (kadam@ucsd.edu), Edward Awh², John Serences¹; ¹University of California San Diego, ²University of Chicago

36.360 The role of theta and alpha oscillations in control of visual working memory-guided attention

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Jiachen Lu² (784652742@qq.com), Xilin Zhang^{1,2}; ¹Key Laboratory of Brain, Cognition and Education Sciences, Ministry of Education, South China Normal University, Guangzhou, Guangdong 510631, China, ²School of Psychology, Center for Studies of Psychological Application, and Guangdong Provincial Key Laboratory of Mental Health and Cognitive Science, South China Normal University, Guangzhou, Guangdong 510631, China

36.361 Sustained Attention and Cue Prioritization in Visual Working Memory

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Stephanie Saltzmann¹ (ssaltz2@lsu.edu), Melissa Beck¹; ¹Louisiana State University

36.362 Attention to remembered items eliminates visual field biases

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Summer Sheremata¹ (ssheremata@fau.edu), Valorie Wiseman; ¹Florida Atlantic University

36.363 Visual working memory and perception share their spatial but not attentional resolution

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Harun Yörük¹ (harunyoruk42@gmail.com), Benjamin J. Tamber-Rosenau¹; ¹University of Houston

36.364 Learned Distractor Rejection Falls Prey to the Attentional White Bear

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Aditya Prakash¹ (adiprakash@uiowa.edu), Andrew Hollingworth²; ¹University of Iowa, Department of Psychological and Brain Sciences

36.365 Memory guidance of attentional sampling, visual search, and working memory use during natural behaviour in virtual reality.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Dejan Draschkow¹, Levi Kumle¹, Rhianna Watt¹, Sage Boettcher¹, Anna C. Nobre¹; ¹University of Oxford

Perceptual Decision-Making: Confidence

36.366 Falsifying the Bayesian confidence hypothesis

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Kai Xue¹ (kxue33@gatech.edu), Medha Shekhar¹, Dobromir Rahnev¹; ¹Georgia Institute of Technology

36.367 Characterizing the metaperceptual function across the entire visual field

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Angela Shen¹ (angela.shen@uci.edu), Megan A. K. Peters¹; ¹University of California, Irvine

36.368 Optimal metacognitive decision strategies in Signal Detection Theory

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Megan Peters¹, Lucie Charles², Brian Maniscalco¹; ¹University of California Irvine, ²Institute of Cognitive Neuroscience, University College London

36.369 Confidence Ratings Reflect Conscious but not Unconscious Perception

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Trevor Caruso¹ (trevorcaruso@gmail.com), Richard Brown¹, Tony Ro¹; ¹CUNY Graduate Center

36.370 Two distinct neural representations of confidence in categorization of a natural image

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Xuan Cui¹, Yaocong Duan¹, Yuening Yan¹, Christopher Benwell², Robin Ince¹, Philippe Schyns¹; ¹School of Psychology and Neuroscience, University of Glasgow, Glasgow, United Kingdom, ²School of Social Sciences, University of Dundee, Dundee, United Kingdom

36.371 Why you should lack confidence in signal-detection-based analyses of confidence

Sunday, May 21, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Derek Arnold¹ (d.arnold@psy.uq.edu.au), Alan Johnston², Joshua Adie³, Kielan Yarrow⁴; ¹Perception Lab, The University of Queensland, ²School of Psychology, The University of Nottingham, ³Research Institute for Sport & Exercise, University of Canberra, ⁴Department of Psychology, City University London

Sunday Afternoon Posters in Pavilion

Plasticity and Learning: Statistical learning

36.401 Dissociating subjective and objective awareness reports using priming

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Karen Tian¹ (ktian@bu.edu), Meghan Walsh¹, Rachel Denison¹; ¹Boston University

36.402 Statistical learning facilitates the selection of stimuli into awareness

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Luzi Xu¹ (l.xu2@uu.nl), Chris Paffen¹, Stefan Van der Stigchel¹, Surya Gayet¹; ¹Utrecht University

36.403 Learning to direct attention in space and time

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Zhenzhen Xu¹ (z.z.xu@vu.nl), Sander A. Los², Jan Theeuwes³; ¹Vrije Universiteit Amsterdam, ²Institute Brain and Behavior Amsterdam (iBBA)

36.404 Similarity enhances visual statistical learning

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Alyssa Levy¹ (alevalt@udel.edu), Timothy Vickery¹; ¹University of Delaware

36.406 Active inference slows reversal learning in uncertain environments

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Jet Lageman¹ (j.lageman@vu.nl), Johannes J. Fahrenfort¹, Heleen A. Slagter¹; ¹Vrije Universiteit Amsterdam

Plasticity and Learning: Tasks, models

36.407 Perceptual adaptation leads to changes in encoding accuracy that match those of a recurrent neural network optimized for predicting the future

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Jiang Mao¹ (jiangmao@sas.upenn.edu), Constantin A. Rothkopf², Alan A. Stocker¹; ¹University of Pennsylvania, ²Centre for Cognitive Science, Technical University of Darmstadt

36.408 Generalization in perceptual learning across stimuli and tasks in varied adaptation levels.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Ravit Kahalani¹ (ravitk27@gmail.com), Maria Lev¹, Dov Sagi², Uri Polat¹; ¹School of Optometry and Vision Science, Faculty of Life Science, Bar-Ilan University, Ramat-Gan, ²The Weizmann Institute of Science, Rehovot, Israel

36.409 Contour erasure affects the contrast threshold for grating targets

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Yih-Shiuan Lin¹ (yihshiuan.lin@gmail.com), Chien-Chung Chen^{2,3}, Mark W Greenlee¹; ¹Institute of Psychology, University of Regensburg, ²Department of Psychology, National Taiwan University, ³Neurobiology and Cognitive Science Center, National Taiwan University

36.410 Non-monotonic plasticity from real-time inception of competition between object representations

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Kailong Peng^{1,2} (kailongpeng001@gmail.com), Jefferey D. Wammes^{3,4}, Alex Nguyen^{5,6}, Marius Cătălin Iordan^{7,8}, Kenneth A. Norman^{5,6}, Nicholas B. Turk-Browne^{1,9}; ¹Department of Psychology, Yale University, ²Interdepartmental Neuroscience Program, Yale University, ³Department of Psychology, Queen's University, ⁴Center for Neuroscience Studies, Queen's University, ⁵Department of Psychology, Princeton University, ⁶Princeton Neuroscience Institute, Princeton University, ⁷Department of Brain and Cognitive Sciences, University of Rochester, ⁸Department of Neuroscience, University of Rochester, ⁹Wu Tsai Institute, Yale University

36.411 Channel-specific perceptual learning of texture detection

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Zahra Hussain¹ (zahra.hussain@plymouth.ac.uk), Melissa Allouche²; ¹University of Plymouth, ²American University of Beirut

36.412 PLFest: A cross-platform application to support open science in perceptual learning research

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Samyukta Jayakumar¹ (samyukta.jayakumar@email.ucr.edu), Marcello Maniglia¹, Trevor Stavropoulos³, Hong Guan², C. Shawn Green², Aaron Seitz¹; ¹University of California, Riverside, ²University of Wisconsin-Madison, ³TAS Consulting

36.413 Paired Comparisons Effectively Drive the Learning of Multi-Category Perceptual Learning

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Victoria L. Jacoby¹ (vjacoby@ucla.edu), Christine M. Massey¹, Philip J. Kellman¹; ¹University of California, Los Angeles

36.414 Delayed feedback limits performance improvements in orientation perceptual learning

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Jiajuan Liu¹ (jiajuanl@gmail.com), Zhong-Lin Lu², Barbara Doshier¹; ¹University of California, Irvine, ²New York University

36.415 Enhancing Multi-Category Perceptual Learning Using Signal Detection Theory Concepts in Dermatologic Cancer Screening

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Philip Kellman¹ (kellman@cognet.ucla.edu), Sally Krasne¹, Everett Mettler¹, Timothy Burke¹, Christine Massey¹; ¹University of California, Los Angeles

36.416 Non-parametric Hierarchical Bayesian Modeling of the Learning Curve in Perceptual Learning

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Zhong-Lin Lu^{1,2} (zhonglin@nyu.edu), Yukai Zhao², Jiajuan Liu³, Barbara Doshier³; ¹NYU Shanghai, ²NYU, ³UCI

Binocular Vision: Integration and rivalry

36.417 Perceptual selection of a musical score during binocular rivalry reported by a relevant action with or without auditory feedback.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Jiyoung Oh¹ (ojy900@korea.ac.kr), Chai-Youn Kim¹; ¹School of Psychology, Korea University, Seoul, Korea

36.418 Direct MEG Comparison of Binocular Rivalry and Monocular Pattern Rivalry

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Austin Cooper¹ (austin.cooper@mail.mcgill.ca), Eric Mokri¹, Jason Da Silva Castanheira², Janine Mendola¹;

¹Department of Ophthalmology and Visual Sciences, McGill University, Montreal, Quebec, Canada, ²Department of Neurology and Neurosurgery and the McConnell Brain Imaging Centre, Montreal Neurological Institute, McGill University, Montreal, Quebec, Canada

36.419 Gradual changes in monocular neural signals during long dominance periods in binocular rivalry

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Shaozhi Nie¹ (nie00043@umn.edu), Stephen Engel¹; ¹University of Minnesota

36.420 Investigating the temporal dynamics of dichoptic masking

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Daniel Gurman¹ (daniel.gurman@mail.mcgill.ca), Alexandre Reynaud¹; ¹Department of Ophthalmology and Visual Sciences, McGill University

36.421 Ocularity-contingent monocular and binocular responses and ocularity functional organizations of V1 superficial-layer neurons in macaques

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

shenghui zhang¹, xingnan zhao¹, shiming tang^{1,2,3}, cong yu^{1,3,4}; ¹PKU-Tsinghua Center for Life Sciences, ²School of Life Sciences, Peking University, ³IDG-McGovern Institute for Brain Research, ⁴School of Psychological and Cognitive Sciences, Peking University

36.422 Learning to discriminate the eye-of-origin during continuous flash suppression

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Izel Sari¹, Samuel Recht², Claudia Lunghi¹; ¹Laboratoire des systèmes perceptifs, Département d'études cognitives, École normale supérieure, PSL University, CNRS, ²Department of Experimental Psychology, University of Oxford

36.423 The sensitivity of human observers to the eye of origin of visual information

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Aishwarya Ravi¹ (aishravi@iu.edu), Clara Mestre¹, Charlene Ubah¹, Jenny C A Read², Rowan Candy¹; ¹Indiana University School of Optometry, ²Biosciences Institute, Newcastle University, UK

36.424 Integration and Suppression Interact in Binocular Vision

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Rong Jiang¹ (1099072076@qq.com), Ming Meng¹; ¹South China Normal University

36.425 Evidence for binocular differencing and summing channels for chromatic stimuli

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Yoel Yakobi¹, Clara Wang¹, Frederick Kingdom¹; ¹McGill University

36.426 Interhemispheric gamma-band synchronization in visual cortex induced by tACS promotes interocular grouping

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Yosun Yoon^{1,2} (yosunyoong@gmail.com), Sang Wook Hong^{1,2}; ¹Department of Psychology, Florida Atlantic University, ²Stiles-Nicholson Brain Institute, Florida Atlantic University

36.427 A dichoptic advantage for detecting out-of-phase modulations of density and contrast

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Michael Morgan¹ (michaelmorgan9331@gmail.com), Kristina Zeljic-Cozma¹, Joshua Solomon¹; ¹City, University of London

36.428 Binocular contrast adaptation explained by separate gain controls before and after the site of binocular summation

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Frederick Kingdom¹ (fred.kingdom@mcgill.ca), Paul Lerner², Mark Georgeson³; ¹McGill University, ²University of Alberta, ³Aston University

3D: Shape

36.429 Increasing motion parallax gain compresses space and 3D object shape

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Xue Teng¹ (xteng@eecs.yorku.ca), Robert Allison¹, Laurie Wilcox¹; ¹Centre for Vision Research, York University

36.430 Evidence of lack of integration of binocular disparity and motion parallax in object segmentation

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Teodora Neagu¹ (teo.neagu@rogers.com), Rebecca Hornsey¹, Arleen Aksay¹, Laurie M Wilcox¹; ¹Department of Psychology, Centre for Vision Research, York University, Toronto, Canada

36.431 Surface Attitude Judgements in Real-World Scenes

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

C. Stella Qian¹ (c.qian3@aston.ac.uk), James H. Elder², Erich W. Graf³, Wendy J. Adams³, Andrew J. Schofield¹; ¹Aston University, UK, ²York University, Canada, ³University of Southampton, UK

36.432 The size of a novel object is learned rapidly, and unlearned slowly, for purposes of computing apparent distance.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Albert Yonas¹ (yonas@umn.edu), Sahana Lawrence¹, Emily Martin¹, Carl Granrud², Ben Backus³, Sherryse

Corrow⁴, Joshua Weekes¹; ¹Arizona State University, ²University of Northern Colorado, ³Vivid Vision, Inc., ⁴Bethel College

36.433 Size perception of 3D objects in general poses

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Dawson Lin¹, Akihito Maruya², Qasim Zaidi²; ¹Dwight-Englewood School, Englewood, USA, ²SUNY College of Optometry

36.434 The Role of Orthogonality and Compactness in Recovering 3D Symmetrical Shapes

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Mark Beers¹ (beersm@uci.edu), Zygmunt Pizlo¹; ¹University of California, Irvine

36.435 Perceptual Learning of Feelies

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Catherine Dowell¹ (catherine.dowell@usm.edu), Alen Hajnal¹; ¹University of Southern Mississippi

36.436 Dynamic graph convolutional networks do not recognize global 3D shapes

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Shuhao Fu¹ (fushuhao@ucla.edu), Zhiqi Zhang¹, Philip Kellman¹, Hongjing Lu¹; ¹University of California, Los Angeles

36.437 The effects of lighting direction and rotation on the perceived 3D shape of faces

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Jordi Asher¹, Abigail Webb², Paul Hibbard¹; ¹University of Essex, ²Institute of Health and Wellbeing, University of Suffolk

36.438 Unsupervised learning can predict properties of non-rigid mirror objects in ambiguous conditions

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Omer F. Yildiran^{1,2} (omer.yildiran@ens.psl.eu), Katherine R. Storrs³, Roland W Fleming², Katja Doerschner²; ¹École normale supérieure - PSL, Paris, France, ²Justus Liebig University, Giessen, Germany, ³University of Auckland, Auckland, New Zealand

36.439 Sphere Stimuli in the Mental Rotation Task: A new set of Ecologically Valid stimuli with Comparative Performance to Traditional Cube Stimuli

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Brandon Eich¹ (beich1@lsu.edu), Melissa Beck¹, Xinrui Jiang², Gaojie Fan¹; ¹Louisiana State University, ²DataCubed Health

36.440 Viewpoint adaptation reveals potential representational differences between 2D images and 3D objects

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Zhiqing Deng¹ (zhiqingdeng@m.scnu.edu.cn), Jie Gao¹, Anthony Li², Yan Chen¹, Boyu Gao³, Jody Culham^{4,5}, Juan

Chen^{1,6}; ¹Center for the Study of Applied Psychology, Guangdong Key Laboratory of Mental Health and Cognitive Science, and the School of Psychology, South China Normal University, Guangzhou, Guangdong Province, 510631, China, ²School of Medicine, Queen's University, Kingston, ON, K7L 3J8, Canada, ³College of Information Science and Technology, Jinan University, Guangzhou, China, ⁴The Brain and Mind Institute, The University of Western Ontario, London, ON, N6A 5B7 Canada, ⁵Department of Psychology, The University of Western Ontario, London, ON, N6A 5C2, Canada, ⁶Key Laboratory of Brain, Cognition and Education Sciences (South China Normal University), Ministry of Education

36.441 The color/shading effect and oriented double opponent neurons: a noise analysis

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Evan Gerritz¹ (evgerritz@gmail.com), Luciano Dyballa¹, Steven W. Zucker¹; ¹Yale University

Perception and Action: Navigation and flow

36.442 Visual Influence Networks in Walking Crowds

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Kei Yoshida¹ (kei_yoshida@brown.edu), William H. Warren¹; ¹Brown University

36.443 Social affordances in human wayfinding

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Serena DeStefani¹ (sd911@rutgers.edu), Karin Stromswold¹, Jacob Feldman¹; ¹Rutgers University

36.444 Steering through multiple waypoints without model-based trajectory planning

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Brett Fajen¹ (fajenb@rpi.edu), A.J. Jansen¹; ¹Rensselaer Polytechnic Institute

36.445 Visual control of steering through multiple waypoints

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

AJ Jansen¹ (jansea@rpi.edu), Nathaniel Powell², Brett Fajen¹; ¹Rensselaer Polytechnic Institute, ²University of Texas at Austin

36.446 Effect of viewing a stretched top-down map on spatial learning of a virtual environment by navigation

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Jie Ding^{1,2} (jjieding11@gmail.com), Jeffrey A Saunders¹; ¹The University of Hong Kong, ²The Education University of Hong Kong

36.447 Qualitative Inconsistency Detection as a novel method for identifying the information used in locomotor interception

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Reinoud J. Bootsma¹, Remy Casanova¹, Albertha A. M. van Opstal¹, Frank T. J. M. Zaal²; ¹Aix Marseille University, CNRS, France, ²University Medical Center Groningen, The Netherlands

36.448 The Impact of High-Contrast Linear Floor Patterns on Human Gait Kinematics

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Greig Dickson¹ (greig.dickson@bristol.ac.uk), Evgeniya Anisimova¹, Ute Leonards¹; ¹University of Bristol

36.449 Vection does not facilitate flow parsing

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Hongyi Guo¹ (hguo06@yorku.ca), Robert Allison¹; ¹Centre for Vision Research, York University

36.450 Neural efficiency in an aviation task with different levels of difficulty: Assessing different biometrics during a performance task

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Mohammad Javad Darvishi Bayazi^{1,2,3}, Andrew Law⁴, Sergio Mejia Romero¹, Sion Jennings⁴, Irina Rish^{2,3}, Jocelyn Faubert^{1,3}; ¹Faubert Lab, Université de Montréal, Montréal, QC, Canada, ²Mila - Québec AI Institute, Montréal, QC, Canada, ³Université de Montréal, Montreal, QC, Canada, ⁴National Research Council Canada (NRC), Ottawa, OT, Canada

Face Perception: Insights from artificial neural networks

36.451 In Silico Approach for Understanding the Associations Between Vision and Emotions Underlying the Uncanny Valley Effect

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Takuya Igaue^{1,2} (t-igaue@aist.go.jp), Ryusuke Hayashi²; ¹The University of Tokyo, ²National Institute of Advanced Industrial Science and Technology

36.452 An Enhanced Dataset for Inferential Emotion Tracking in Humans and Machines

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Ethan Shedd¹ (shedd@berkeley.edu), Zhihang Ren¹, Jefferson Ortega¹, Ananya Sharma¹, Wish Wang¹, Stella Yu^{1,2}, David Whitney¹; ¹University of California, Berkeley, ²University of Michigan, Ann Arbor

36.454 Deep convolutional neural networks are sensitive to configural properties of faces

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Virginia Strehle¹ (ves180000@utdallas.edu), Natalie Bendiksen¹, Alice O'Toole¹; ¹The University of Texas at Dallas

36.455 Recognizing people by body shape using deep networks of images and words

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Blake Myers¹ (blake.myers@utdallas.edu), Matthew Hill¹, Veda Gandhi¹, Thomas Metz¹, Lucas Jaggernauth¹, Carlos Castillo², Alice O'Toole¹; ¹University of Texas at Dallas, ²Johns Hopkins University

36.456 Comparison of human observers and a deep learning model in recognition of static robot facial expressions

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Dongsheng Yang^{1,2} (yang.dongsheng.46w@st.kyoto-u.ac.jp), Wataru Sato^{1,2}, Takashi Minato², Shushi Namba²,

Shin'ya Nishida^{1,3}; ¹Kyoto University, ²Guardian Robot Project, RIKEN, ³NTT Communication Science Laboratories, Nippon Telegraph and Telephone Corporation, Atsugi, Japan

36.457 Comparing Humans and Deep Neural Networks on face recognition under various distance and rotation viewing conditions

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Michal Fux¹ (fux.michal@gmail.com), Suayb S Arslan¹, Hojin Jang¹, Xavier Boix¹, Avi Cooper¹, Matt J Groth¹, Pawan Sinha¹; ¹MIT

36.458 Artifact magnification on deepfake videos increases human detection and subjective confidence

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Emilie Josephs¹, Camilo Fosco¹, Aude Oliva¹; ¹CSAIL, MIT

36.459 Videos, Deepfakes, and Dynamic Morphs: Neural and Perceptual Differences for Real and Artificial Faces.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Casey Becker¹, Russell Conduit¹, Philippe A Chouinard², Robin Laycock¹; ¹RMIT University, ²La Trobe University

Perceptual Organization: Shape, figure/ground, occlusion

36.460 Spatial structure aids shape perception and feature extraction

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Garance Merholz¹ (gmerholz@gmail.com), Árni Kristjánsson¹, David Pascucci²; ¹Icelandic Vision Laboratory, School of Health Sciences, University of Iceland, ²Laboratory of Psychophysics, Brain Mind Institute, School of Life Sciences, École Polytechnique Fédérale de Lausanne (EPFL)

36.461 Probing perceptual mechanism of shape-contingent color after-images via interconnected recursive filters

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Angelica Godinez^{1,2} (angelica.godinez@hu-berlin.de), Aravind Battaje^{1,3}, Oliver Brock^{1,3}, Martin Rolfs^{1,2}; ¹Cluster of Excellence Science of Intelligence, Technische Universität Berlin, Germany, ²Department of Psychology, Humboldt Universität zu Berlin, Germany, ³Robotics and Biology Laboratory, Technische Universität Berlin, Germany

36.462 Global Factors in Perceptual Shape Completion

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Tenzin Chosang¹ (tencho@my.yorku.ca), Keyi Liu¹, James Elder¹; ¹York University

36.463 Processing of coarse and fine shape features by humans and deep networks: A shape frequency analysis

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

JAMES ELDER¹ (jelder@yorku.ca), Nicholas Baker², John Wilder³, Tenzin Chosang¹; ¹York University, Canada, ²Loyola University, ³Northeastern University

36.464 Up is best

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Stuart Anstis¹ (sanstis@ucsd.edu), Patrick Cavanagh; ¹UCSD, ²York University

36.465 Color-Object Semantics Affects Object Detection

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Karen B. Schloss¹ (kschloss@wisc.edu), Carter M. Thompson², Jingming Xue², Mary A. Peterson²; ¹University of Wisconsin-Madison, ²University of Arizona

36.466 Relative luminance of ambiguous figure/ground regions impacts the ability of the watercolor illusion to bias figure assignment

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Patsy Folds¹ (pefold8941@ung.edu), Courtney Nutt², Tanner Lumpkin³, Ralph Hale⁴; ¹University of North Georgia

36.467 Occlusion impairs numerical discrimination of objects in real-world scenes

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Lauren Aulet¹ (laulet@andrew.cmu.edu), Evren Konuk¹, Jessica Cantlon¹; ¹Carnegie Mellon University

36.468 A systematic bias in the perceived location of a triangle's occluded vertex.

Sunday, May 21, 2023, 2:45 – 6:45 pm, Pavilion

Tess L. White¹ (tessw@unr.edu), Chidera J. Abiakam¹, Madalyn C. Sawatzky¹, Drew G. Asborn¹, Lars Strother¹, Gideon Paul Caplovitz¹; ¹University of Nevada, Reno

Monday Morning Posters in Banyan Breezeway

Object Recognition: Models

43.301 Visual Analogy Between Object Parts

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Hongjing Lu¹ (hongjing@ucla.edu), Shuhao Fu¹; ¹University of California, Los Angeles

43.302 A study of humans and convolutional neural networks on how to recognize blurry objects at the threshold of visibility

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Hojin Jang¹ (jangh@mit.edu), Frank Tong²; ¹Department of Brain and Cognitive Sciences, MIT, ²Department of Psychology and Vanderbilt Vision Research Center, Vanderbilt University

43.303 Evaluating machine comprehension of sketch meaning at different levels of abstraction

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Xuanchen Lu¹ (xul076@ucsd.edu), Kushin Mukherjee², Rio Aguina-Kang¹, Holly Huey¹, Judith E. Fan¹; ¹University of California, San Diego, ²University of Wisconsin-Madison

43.304 Face-deprived networks show distributed but not clustered face-selective

maps

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Fenil R. Doshi¹ (fenil_doshi@fas.harvard.edu), Talia Konkle¹; ¹Harvard University

43.305 Feature Visualizations do not sufficiently explain hidden units of Artificial Neural Networks

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Thomas Klein^{1,2} (t.klein@uni-tuebingen.de), Wieland Brendel², Felix Wichmann¹; ¹Neural Information Processing Group, University of Tübingen, ²Max Planck Institute for Intelligent Systems, Tübingen

43.306 Is it always computationally advantageous to use segregated pathways to process different visual stimulus attributes separately?

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Zhixian Han¹ (han594@purdue.edu), Anne Sereno¹; ¹Purdue University

43.307 Language Models of Visual Cortex: Where do they work? And why do they work so well where they do?

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Colin Conwell¹ (conwell@g.harvard.edu), Jacob S. Prince¹, George A. Alvarez¹, Talia Konkle¹; ¹Harvard University

43.308 Phase-Dependent Asymmetry of Pattern Masking in Natural Images Explained by Intrinsic Position Uncertainty

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Anqi Zhang^{1,2} (anqizhang@utexas.edu), Eric Seemiller³, Wilson Geisler¹; ¹Center for Perceptual Systems, University of Texas at Austin, ²Department of Physics, University of Texas at Austin, ³711th Human Performance Wing, Air Force Research Laboratory

43.309 Statistical inference on representational geometries

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Heiko Schütt^{1,2} (heiko.schuett@nyu.edu), Alexander D. Kipnis³, Jörn Diedrichsen⁴, Nikolaus Kriegeskorte²; ¹New York University, ²Zuckerman Institute, Columbia University, ³Max Planck Institute for Biological Cybernetics, ⁴Western University

43.310 The role of scene context in object recognition by humans and convolutional neural networks

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Haley G. Frey¹, Hojin Jang¹, Hui-Yuan Miao¹, Frank Tong¹; ¹Vanderbilt University

43.311 Uncovering high-level visual cortex preferences by training convolutional neural networks on large neuroimaging data

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

K. Seeliger¹, R. Leipe^{1,2}, J. Roth¹, M. N. Hebart^{1,3}; ¹Vision and Computational Cognition Group, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, ²Leipzig University, Germany, ³Department of Medicine, Justus Liebig University Giessen, Germany

43.312 Visual angle and image context alter the alignment between deep convolutional neural networks and the macaque ventral stream

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Sara Djambazovska^{1,2} (sara_djambazovska@hms.harvard.edu), Gabriel Kreiman², Kohitij Kar³; ¹Swiss Federal Institute of Technology, Lausanne (EPFL), ²Harvard Medical School, ³York University

43.313 Predicting human camouflage detection with a principled computational model

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Abhranil Das¹ (abhranil.das@utexas.edu), Wilson S Geisler¹; ¹University of Texas at Austin

43.314 A Generalized Framework for Optimizing and Informing the Implementation of QUEST

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ethan Duwell¹ (eduwell@mcw.edu), Gennadiy Gurariy¹, Adam Greenberg¹; ¹Medical College of Wisconsin

43.315 Top-down and within-layer recurrent connections in artificial networks are needed to solve challenging visual tasks

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Andrea Ivan Costantino¹ (andreaivan.costantino@kuleuven.be), Hans Op de Beeck¹; ¹KU Leuven

Scene Perception: Spatiotemporal factors

43.316 Comparing explicit and implicit ensemble perception

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Shaul Hochstein¹ (shaulhochstein@gmail.com), Noam Khayat¹, Marina Pavlovskaya¹; ¹ELSC Safra Center for Brain Research & Life Sciences Institute, Hebrew University, Jerusalem

43.317 The influence of scene context on individual and ensemble encoding of object positions

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yanina E. Tena Garcia¹ (yanina.e.tena-garcia@psychol.uni-giessen.de), Bianca R. Baltaretu¹, Katja Fiehler¹; ¹Experimental Psychology, Justus Liebig University Giessen, Giessen, Germany

43.318 Scene memory for intrinsic and extrinsic boundaries

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Carmela Gottesman¹ (cvgottesman@sc.edu); ¹University of South Carolina Salkehatchie

43.319 How to build a scene: Relational representations are constructed in a canonical order

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Zekun Sun¹ (zekun@jhu.edu), Chaz Firestone¹, Alon Hafri²; ¹Johns Hopkins University, ²University of Delaware

43.320 Where was the moose? The time course of dynamic road scene perception

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Benjamin Wolfe¹ (benjamin.wolfe@utoronto.ca), Cristeidy Gonzalez¹, Anna Kosovicheva¹; ¹University of Toronto Mississauga

43.321 Neural dynamics of natural scene processing across cortical areas as revealed by EEG decoding

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Taiki Orima^{1,2}, Isamu Motoyoshi¹; ¹The University of Tokyo, ²Japan Society for the Promotion of Science

43.323 Central Vision Loss Worsens Scene Understanding and Increases Eye Movement Variability

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Byron Johnson¹ (byron_johnson@ucsb.edu), Puneeth N. Chakravarthula¹, Shravan Murlidaran¹, Ansh Soni¹, Michael Beyeler¹, Miguel P. Eckstein¹; ¹University of California, Santa Barbara

43.324 "Visual verbs": Dynamic event types (such as twisting vs. rotating) are extracted quickly and spontaneously during visual perception

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Huichao Ji¹ (huichao.ji@yale.edu), Brian Scholl¹; ¹Yale University

43.325 Spatiotemporal continuity of background image sequence influences the criterion of object change detection

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jieun Cho¹ (jieuncho@yonsei.ac.kr), Sang Chul Chong^{1,2}; ¹Graduate Program in Cognitive Science, Yonsei University, ²Department of Psychology, Yonsei University

43.326 Numerosity Estimation in Accumulated Spatial Arrays: Does Anchoring Limit Accuracy?

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Frank Durgin¹ (fdurgin1@swarthmore.edu), John Grey Crosby¹; ¹Swarthmore College

Attention: Temporal, templates, memory

43.328 Former target representations reach forward in time and proactively interfere with attentional guidance

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Zengbo Xie¹ (zengbo.xie@vanderbilt.edu), Geoffrey Woodman²; ¹Vanderbilt University

43.329 Perceptual noise disrupts flanker suppression: Evidence from a novel type of noise in the colour domain and Bayesian modelling

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Dietmar Heinke¹ (d.g.heinke@bham.ac.uk), Jordan Deakin¹; ¹University of Birmingham

43.330 The Role of Object Stability in the Allocation of Attention

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ece Yucer¹ (ece.yucer@mail.utoronto.ca), Jay Pratt¹; ¹University of Toronto

43.331 Attentional control settings determine not only what captures attention, but where attention goes once captured

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Samantha Joubran¹ (sjoubran@uoguelph.ca), Anna Katzatchkova¹, Fatima Abboud², Naseem Al-Aidroos¹;
¹University of Guelph, ²McGill University

43.332 Visual versus verbal attentional templates guiding visual search

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Anna Grubert¹ (anna.k.grubert@durham.ac.uk), Daisy McGonigal¹, Mikel Jimenez¹; ¹Durham University

43.333 Enhanced representation of visual stimuli near a suppressed distractor

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Xiaojin Ma¹ (xiaojinma@wustl.edu), Richard A. Abrams¹; ¹Washington University in St. Louis

43.334 Assessing the Role of Long-Term Memory and Visual Working-Memory Attentional Templates in Guiding Attentional Capture and Decision Making

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jessica Kespe¹, Niyatee Narkar³, Naseem Al-Aidroos²; ¹University of Guelph

43.335 Meta-analytic Evidence for Working Memory-Driven Visual Attention Capture

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Tianye Ma¹ (tma039@ucr.edu), Weiwei Zhang; ¹University of California, Riverside

Attention: Features

43.336 A top-down attentional network selects vs. reduces the same features for different visual categorizations of the same scenes

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yaocong Duan¹ (y.duan.1@research.gla.ac.uk), Robin Ince¹, Joachim Gross², Philippe Schyns¹; ¹School of Psychology and Neuroscience, University of Glasgow, ²Institute for Biomagnetism and Biosignalanalysis, University of Muenster, Germany

43.337 Are attentional templates based on physical feature values or perceptual interpretations?

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Vladislav Khvostov^{1,2}, Árni Gunnar Ásgeirsson³, Árni Kristjánsson¹; ¹Icelandic Vision Lab, University of Iceland, ²HSE University, Russia, ³University of Akureyri, Iceland

43.338 Feature-based attention modulates population spatial frequency tuning

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Luis D. Ramirez¹ (luisdr@bu.edu), Feiyi Wang², Sam Ling¹; ¹Boston University, ²Tufts University

43.339 Feature-based suppression and salience guide attention simultaneously.

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Aniruddha Ramgir¹ (aniruddha.ramgir@gmail.com), Dominique Lamy¹; ¹Tel Aviv University

43.340 Highly efficient attentional selection of colors despite high target-distractor similarity

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Angus Chapman¹, Viola Störmer²; ¹University of California San Diego, ²Dartmouth College

43.342 Preparatory attention to visual features primarily relies on non-sensory representation

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Taosheng Liu¹, Yilin Chen², Mengyuan Gong²; ¹Michigan State University, ²Zhejiang University

43.343 The interaction between color categories and attention

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Aimee Martin¹, Karl Gegenfurtner¹; ¹University of Giessen

43.344 The effects of visual dimensions on attentional dynamics

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Rachel Eddings¹ (redning2@vols.utk.edu), Aaron Buss¹; ¹University of Tennessee, Knoxville

43.345 Perceived distance modulates attention allocation

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Tasfia Ahsan^{1,2} (ahsant@my.yorku.ca), Laurie M. Wilcox^{1,2}, Erez Freud^{1,2}; ¹York University, ²Centre for Vision Research

43.346 Lower Search Efficiency for Conjunction vs. Feature Search for Convolutional Neural Networks

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ansh K Soni¹ (asoni@ucsb.edu), Sudhanshu Srivastava¹, Miguel P Eckstein¹; ¹University of California - Santa Barbara

43.347 The greener, the slower: Distraction from Relational Templates in Visual Foraging

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jan Tünnemann¹ (jan.tuennermann@uni-marburg.de), Inga Grössle¹, Anna Schubö¹; ¹Phillips University Marburg

Image Preference, Statistics and Aesthetics

43.348 Individual differences in image preferences: a personalized image enhancement method

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Sarit F. A. Szpiro^{1,2} (sarit.szpiro@edu.haifa.ac.il), Amit Yashar^{1,2}; ¹Special Education Department, University of

Haifa, ²The Edmond J. Safra Brain Research Center, University of Haifa

43.349 The prototype effect in aesthetic preferences for visual scenes: A computational account

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yi-Chia Chen¹ (yichiachen@g.ucla.edu), Shuhao Fu¹, Derek Feng², Moriah Taylor¹, Jeffrey Chang¹, Xiaoyang Chi¹, Hongjing Lu¹; ¹University of California, Los Angeles, ²Yale University

43.350 Aesthetic value modulates gaze patterns on proto-object locations

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Delaram Farzanfar¹ (delaram.farzanfar@mail.utoronto.ca), Morteza Rezanejad¹, Dirk B. Walther¹; ¹Department of Psychology, University of Toronto

43.351 Attention improves after seeing images of nature that are not too captivating

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Claudia Damiano¹ (claudia.damiano@kuleuven.be), Johan Wagemans¹; ¹KU Leuven

43.352 Perceiving style at different levels of information

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yuguang Zhao¹ (y.zhao-5@tudelft.nl), Huib de Ridder¹, Jeroen Stumpel², Maarten Wijntjes¹; ¹Delft University of Technology, ²Utrecht University

43.353 Deep network representation of art style similarity judgments

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Anna Bruns¹ (anna.bruns@nyu.edu), Ming Gao¹, Abhishek Dendukuri¹, Jenna Eubank¹; ¹New York University

43.354 The effects of quantity, order, and spatial proximity of elements on subjective complexity judgment

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Minseong Jin¹ (minseongjin@korea.ac.kr), Jiwon Song¹, Chai-Youn Kim¹; ¹School of Psychology, Korea University, Seoul, Korea

43.355 The relationship between image statistics and aesthetic preference for art and natural scenes

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Alex Swartz¹ (a.swartz@sussex.ac.uk), Martina Guido¹, Alice Skelton¹, Jenny Bosten¹, Anna Franklin¹, John Maule¹; ¹University of Sussex

43.356 The Disputed Quartet: Embracing individuality in beauty judgment

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Maria Pombo¹, Denis Pelli¹; ¹New York University

Undergraduate Just-In-Time 2

43.357 Visual working memory retrieval as an accumulation-to-bound decision

process: evidence from the P3b

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Luke Atack¹, Stephen Emrich¹; ¹Brock University

43.358 Brain-wide functional connectivity of single face patch neurons during rest

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Rebecca Bhik-Ghanie¹ (rebecca.bhikghanie@nih.gov), Daniel Zaldivar¹, David Leopold¹; ¹SCNI, Lab of Neuropsychology, NIMH, NIH

43.359 Manipulating uncertainty in value-driven attentional capture

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nicole Massa¹, Nick Crotty¹, Ifat Levy², Michael Grubb^{1,2}; ¹Trinity College, ²Yale School of Medicine

43.360 Familiarity and Scene Understanding

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Bridget Meighan¹, Elissa Aminoff¹; ¹Fordham University

43.361 Effects of covert visual spatial attention in multi-pseudo-letter processing.

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Katelyn Osuna¹ (kosuna@stanford.edu), Jason Yeatman¹, Maha Ramamurthy¹; ¹Division of Developmental Behavioral-Pediatrics, School of Medicine & Graduate School of Education, Stanford University.

43.362 Reflection Rumination increases Eye Saccade Curvature towards distractors in a Looking Task

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Isaias Perez¹, Bryan George¹, Cozy DeRosa¹, Ashley Latibeaudiere¹, Dr. Max Owens¹; ¹University of South Florida

43.363 Eye Movement Analysis of Upright vs Inverted Expressions

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Angeline Yang¹, Susana Chung¹; ¹UC Berkeley

43.364 Characteristics of fixational eye movements in individuals with ADHD

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kathlyn Bako¹ (katbako@berkeley.edu), Matthew Anderson¹, Susana Chung¹; ¹University of California, Berkeley

43.365 Symmetry Benefits Working Memory Representations of Object Orientation

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Shaya Samet¹, Yara Iskandar¹, Erez Freud¹, Peter J Kohler¹; ¹York University

43.366 Evaluating developmental shape selectivity from simultaneous multi-unit recordings along the ventral visual pathway

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

A. Ezra Sutter¹, Gerick M. Lee², Timothy D. Oleskiw^{2,3}, Najib J. Majaj², Lynne Kiorpes², J. Anthony Movshon²; ¹Drew University, ²Center for Neural Science, New York University, ³Center for Computational Neuroscience,

43.367 Are the Effects of Familiarity with the Size of a Novel Object on the Perception of Distance the Result of an Associative or Trigonometric Process ?

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Emily Martin¹, Yunlong Zhang¹, Sahana Lawrence¹; ¹Arizona State University

43.368 Differences in preferred retinal loci of fixation in monocular versus binocular vision

Monday, May 22, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Maximilian Freiberg^{1,2} (maximilian.freiberg@web.de), Aleksandr Gutnikov¹, Christian Meltendorf², Stephan Reiß², Ralph Krüger², Wolf M. Harmening¹; ¹University Eye Clinic Bonn, ²Berlin University of Applied Sciences and Technology

Monday Morning Posters in Pavilion

Eye Movements: Individual differences, novel measurement

43.401 No evidence for a relation between individual differences in the central scene-viewing bias and head movement propensity

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Patricia R. Mueller¹ (patricia.mueller@physik.tu-chemnitz.de), Sabine Grimm¹, Wolfgang Einhäuser¹; ¹Chemnitz University of Technology

43.402 Arousal levels modulates saccadic main sequence and stationary gaze entropy in partially sleep-deprived drivers

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Carolina Diaz-Piedra^{1,2} (dipie@ugr.es), Francesco Angioi¹, Marcelo A. C. Fernandes^{1,3}, Christophe Prat⁴, Jaka Sodnik⁵, Leandro L. Di Stasi^{1,6}; ¹University of Granada, ²Arizona State University, ³Federal University of Rio Grande do Norte, ⁴Commissariat à l'énergie atomique et aux énergies alternatives, ⁵University of Ljubljana, ⁶Joint Centre University of Granada - Spanish Army Training and Doctrine Command

43.403 Speed of Information Processing in Infants and Adults: Age Differences in Saccadic Reaction Time Sensitivity

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Scott Adler¹ (adler@yorku.ca); ¹York University

43.404 Spatial predictability modulates oculomotor deficits in low persistence displays

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Clara Kuper^{1,2,3} (clara.kuper@student.hu-berlin.de), Xiuyun Wu¹, T. Scott Murdison¹; ¹Realty Labs, Meta Platforms Inc., ²Department of Psychology, Humboldt-Universität zu Berlin, Germany, ³Berlin School of Mind and Brain, Humboldt-Universität zu Berlin, Germany

43.405 Neuroiconica - Collaborative cloud tool for online analytics of eye tracking data

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Evgenii Shelepin¹ (xensey@gmail.com); ¹Neuroiconica, ²Pavlov Institute of Physiology

43.406 Assessing the accuracy of eye-tracking through passive filter and active shutter-glasses.

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Sophie Kenny¹ (skenny@vpixx.com), Jonathan Tong¹, Amanda Estephan¹; ¹VPixx, Canada

43.407 3D-Printable Non-invasive Head Immobilization System for Non-Human Primates

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Tyler Swedan¹ (tyler.swedan@nih.gov), Elia Shahbazi¹, Timothy Ma², Rosa Lafer-Sousa¹, Reza Azadi¹, Amy Ryan¹, Drew Nguyen¹, Arash Afraz¹; ¹NIH/NIMH, ²New York University

43.408 Investigation of camera-free eye tracking glasses compared to a video-based system

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Claudia Martin Calderon¹ (ca6marti@uwaterloo.ca), Abdullah Zafar¹, Anne Marie Yeboah², Kristine Dalton², Elizabeth Irving², Ewa Niechwiej-Szwedo¹; ¹University Of Waterloo, Faculty of Health, ²University Of Waterloo, School of Optometry & Vision Science

43.409 Individual differences in gaze behavior: Comparing high-level and sensory contributions

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Dyllan Simpson¹ (dyllan.simpson@mail.utoronto.ca), Benjamin Wolfe¹, Anna Kosovicheva¹; ¹University of Toronto Mississauga

43.410 vrGazeCore: an open-source package for virtual reality eye-tracking analysis

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Thomas L. Botch¹ (thomas.l.botch@dartmouth.edu), Amanda J. Haskins¹, Deepasri Prasad¹, Jeff Mentch^{1,2}, Caroline E. Robertson¹; ¹Dartmouth College, ²Massachusetts Institute of Technology

43.411 Directional effects on saccadic sequence and post-saccadic oscillations

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Gao Mingjie¹ (18640729509@163.com), Wang Ailing¹, Zhu Weina², Jan Drewes¹; ¹Institute of Brain and Psychological Sciences, Sichuan Normal University, Chengdu, China, ²School of Information Science, Yunnan University, Kunming, China

43.412 Effect of Lateral Saccade Direction on Saccade Profile and Post-Saccadic Overshoot in Young and Senior People

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Wang Ailing¹ (joylin12@163.com), Gao Mingjie¹, Zhu Weina², Jan Drewes¹; ¹Institute of Brain and Psychological Sciences, Sichuan Normal University, Chengdu, China, ²School of Information Science, Yunnan University, Kunming, China

Visual Working Memory: Serial dependence

43.413 Contrasting the roles of object-based attention, spatial distance, and hemifield in serial dependence

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Christian Houborg¹ (christianhouborg@hotmail.com), Árni Kristjánson¹, David Pascucci²; ¹Vision Sciences Laboratory, School of Health Sciences, University of Iceland, Reykjavik, Iceland., ²Laboratory of Psychophysics, Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland.

43.415 Previous and current action targets held in working memory determine repulsive and attractive serial dependence

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Cora Fischer¹ (cora.fischer@med.uni-frankfurt.de), Sebastian Fohs¹, Jochen Kaiser¹, Christoph Bledowski¹; ¹Institute of Medical Psychology, Goethe University Frankfurt

43.417 The state of working memory maintenance alters the direction of serial dependence

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Kuo-Wei Chen¹ (kchen172@asu.edu), Brian Carlson¹, Gi-Yeul Bae¹; ¹Arizona State University

43.418 Temporal dynamics of the visual representation of orientation ensemble perception

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Ryuto Yashiro¹ (ryuto-yashiro@g.ecc.u-tokyo.ac.jp), Masataka Sawayama¹, Kaoru Amano¹; ¹The University of Tokyo

43.419 The current top-down attentional set is shaped by previous selection episodes

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Changrun Huang^{1,2} (c.huang@vu.nl), Dirk van Moorselaar^{1,2}, Mieke Donk^{1,2}, Jan Theeuwes^{1,2,3}; ¹Vrije Universiteit Amsterdam, Amsterdam, the Netherlands, ²Institute Brain and Behavior (iBBA), Amsterdam, the Netherlands, ³William James Center for Research, ISPA-Instituto Universitario, Lisbon, Portugal

43.420 Positive serial dependence effects in rating food images for appeal and calories

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

David Alais¹ (david.alais@sydney.edu.au), Thomas Carlson¹; ¹University of Sydney

43.421 Costs of manipulating representations of approximate visual magnitudes stored in visual working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Chen Cheng¹ (chencheng.psy@gmail.com), Xuechen Ding², Melissa Kibbe³; ¹The Hong Kong University of Science and Technology, ²Shanghai Normal University, ³Boston University

Visual Working Memory: Neural mechanisms

43.422 Investigating the effects of perceptual complexity versus conceptual meaning on the neural correlates of visual working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Alyssa Thibeault¹ (wy20rd@brocku.ca), Keynen Lynett¹, Chae Bush¹, Christopher Keightley¹, Bobby Stojanoski², Stephen M. Emrich¹; ¹Brock University, ²Ontario Tech University

43.423 Intuitive physics guides visual tracking and working memory: The dynamics of neural processing in expectation violation

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Halely Balaban^{1,2} (halely@mit.edu), Kevin Smith¹, Joshua Tenenbaum¹, Tomer Ullman²; ¹Massachusetts Institute of Technology (MIT), ²Harvard

43.424 Neurophysiological mechanisms of action-modulated prioritization in visual working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Caterina Trentin¹ (c.trentin@vu.nl), Christian N.L. Olivers¹, Heleen A. Slagter¹; ¹Vrije Universiteit

43.425 Observability of Visual Working Memory Brain Circuitry With Functional Near-Infrared Spectroscopy

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

David Beeler¹ (dbeeler@bu.edu), Yuanyuan Gao¹, Vaibhav Tripathi¹, Alice Cronin-Golomb¹, Theresa Ellis¹, Swathi Kiran¹, Alexander von Lühmann^{1,2}, Meryem Yücel¹, David Boas¹, David Somers¹; ¹Boston University, ²Technische Universität Berlin

43.426 The interdependence of the memory reactivation of items and task rules

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Yagmur Damla Senturk¹ (yagmursenturk@sabanciuniv.edu), Nursima Ünver^{1,2}, Can Demircan¹, Tobias Egner³, Eren Günseli¹; ¹Sabanci University, ²University of Toronto, ³Duke University

43.427 Characterizing the spatial organization of population codes in macaque prefrontal cortex during visuospatial tasks

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Jinkang (Derrick) Xiang¹ (jxiang27@uwo.ca), Megan Roussy¹, Benjamin Corrigan¹, Rogelio Luna¹, Maryam Mofrad¹, Lyle Muller¹, Julio Martinez-Trujillo¹, Marieke Mur¹; ¹The University of Western Ontario

43.428 Theta-gamma phase-amplitude coupling as a marker of cognitive deficits in schizophrenia

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Orestis Papaioannou¹, Molly Erickson¹; ¹University of Chicago

43.429 Dissociating the effects of degraded visual input on cognitive processes using EEG markers of selective attention and working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Sarah Sheldon¹ (s.sheldon@northeastern.edu), MiYoung Kwon¹; ¹Northeastern University

43.430 Visual representations shift from a retinal to a real-world reference frame during visual working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Maria V. Servetnik^{1,4} (servetnikmaria@gmail.com), Nicolas Pollán Hauer², Michael J. Wolff¹, Chaipat Chunharas³, Rosanne L. Rademaker¹; ¹Ernst Strüngmann Institute (ESI) for Neuroscience in Cooperation with the Max Planck Society, Frankfurt, Germany, ²Centre de Recerca Matemàtica, Campus de Bellaterra, Barcelona, Spain, ³Department of Medicine, King Chulalongkorn Memorial Hospital, Chulalongkorn University, Bangkok, Thailand, ⁴Department of Cognitive Neuroscience, Vrije Universiteit Amsterdam, The Netherlands

43.431 Sad and fearful face distractors do not consume working memory resources in depressed adults

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Chaoxiong Ye^{1,2,3} (chaoxiong.c.ye@jyu.fi), Qianru Xu⁴, Xueqiao Li², Elisa Vuoriainen³, Qiang Liu¹, Piia Astikainen²; ¹Sichuan Normal University, Chengdu, China, ²University of Jyväskylä, Jyväskylä, Finland, ³Tampere University, Tampere, Finland, ⁴University of Oulu, Oulu, Finland

43.432 Shared neural representations of orientation and location information during working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Joana Pereira Seabra^{1,2} (joana.seabra@bccn-berlin.de), Vivien Chopurian^{1,2}, Andreea-Maria Gui^{1,2}, Alessandra S. Souza^{3,4}, Thomas B. Christophel^{1,2}; ¹Humboldt University of Berlin, ²Bernstein Center for Computational Neuroscience Berlin, ³University of Porto, ⁴University of Zurich

43.433 Neural evidence for high-to-low level decoding in orientation working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Yan Yang^{1,3} (yangy@ibp.ac.cn), Zhentao Zuo^{1,2,3}, Tiangang Zhou^{1,2,3}; ¹State Key Laboratory of Brain and Cognitive Science, Institute of Biophysics, Chinese academy of sciences, ²Hefei Comprehensive National Science Center, Institute of Artificial Intelligence, ³University of Chinese academy of sciences

43.434 Neural representations of orientation reflect the oblique effect during perception, and repulsion bias during working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Michael Wolff¹ (michael-josef.wolff@esi-frankfurt.de), Rosanne Rademaker; ¹Ernst Strüngmann Institute for Neuroscience in cooperation with the Max Planck Society

43.435 A matter of availability: Sharper tuning for memorized than for perceived stimulus features.

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Samson Chota¹ (samson.chota@googlemail.com), Surya Gayet¹, J. Leon Kenemans¹, Christian N.L. Olivers², Stefan Van der Stigchel¹; ¹Utrecht University, ²Vrije Universiteit Amsterdam

43.436 The spatial tuning of cortical responses during visual memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Robert Woodry¹, Clayton Curtis¹, Jonathan Winawer¹; ¹New York University

43.437 EEG Decoding Reveals Distinct Processes for Directing Spatial Attention and Encoding into Working Memory.

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Henry Jones¹ (henryjones@uchicago.edu), William Ngiam¹, Edward Awh¹; ¹University of Chicago

43.438 Oscillation Gates Efficacy of Optogenetically-Induced V4 Inputs to FEF

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Phillip Comeaux¹ (phillip.comeaux@utah.edu), Lauri Nurminen², Frederick Federer¹, Alessandra Angelucci¹, Behrad Noudoost¹; ¹University of Utah, ²University of Houston

43.439 Connectomic Investigation of the Frontal Eye Field and Inferior Frontal Junction

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Marco Bedini^{1,3} (marco.bedini@unitn.it), Emanuele Olivetti^{1,2}, Paolo Avesani^{1,2}, Daniel Baldauf¹; ¹University of Trento, ²Bruno Kessler Foundation, ³University of California, San Diego

43.440 Visual Cortical Functional Connectivity With Cerebellar Cortex Reveals Multiple, Fine-Scale Cortico-Cerebellar Networks for Vision

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Ryan Marshall¹ (ryanmars@bu.edu), Vaibhav Tripathi², David Somers³; ¹Boston University

Visual Working Memory: Space, features, objects

43.441 Color- and semantic-sharing bonuses in visual working memory: The deeper the processing, the greater the benefits for real-world objects

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Hanane Ramzaoui¹ (hanane.ramzaoui@univ-cotedazur.fr), Fabien Mathy², Candice C. Morey³; ¹Louisiana State University, ²Université Côte d'Azur, BCL, CNRS, ³Cardiff University

43.442 Flexibility between feature-based and object-based representations in working memory for reinforcement learning

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Kengo Shibata¹ (kengo.shibata@lincoln.ox.ac.uk), Verena Klar¹, Sooraj Mahesh¹, Masud Husain¹, Sanjay G Manohar¹; ¹University of Oxford

43.443 Meaningful objects are privileged in working memory: better incidental memory of recognizable relative to unrecognizable objects

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Yong Hoon Chung¹ (yong.hoon.chung.gr@dartmouth.edu), Joyce Tam², Brad Wyble², Viola Stoermer¹; ¹Dartmouth College, ²Penn State University

43.444 Probing the prioritization of multiple spatial locations held in working memory.

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Jordan Garrett^{1,2}, Daniel Thayer^{1,2}, Thomas Sprague^{1,2}, Barry Giesbrecht^{1,2}; ¹University of California, Santa Barbara, ²Institute for Collaborative Biotechnologies

43.445 The Role of Low-Level Perceptual Similarities in the Visual Working Memory Mixed-Category Effect

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Reut Peled¹ (reutgadot@gmail.com), Roy Luria^{1,2}; ¹The school of Psychological Sciences, ²The Sagol School of Neuroscience

43.446 Remembering where, but not what: how spatial and object visual memory change across delays in recall

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Emma Megla¹ (emmamegla22@gmail.com), Samuel R. Rosenthal¹, Wilma A. Bainbridge¹; ¹University of Chicago

43.447 Caricaturing shapes in visual memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Subin Han¹, Zekun Sun², Chaz Firestone²; ¹University of Oregon, ²Johns Hopkins University

43.448 Faces in Working Memory Cause Racial Biases in Subsequent Trustworthiness Judgments

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Sanika Paranjape¹, Sarah Shomstein¹, Dwight Kravitz¹; ¹The George Washington University

43.449 Scene and object false memory in a photo-realistic paradigm

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Shaela Jalava¹ (19stj@queensu.ca); ¹Queen's University

43.450 Microsaccade directions track spatial oculomotor-based rehearsal of non-spatial object features in visual working memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Eelke de Vries¹ (evs236@vu.nl), Freek van Ede¹; ¹Vrije Universiteit Amsterdam

43.451 Working memory and the source of color categories in macaques

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Daniel Garside¹ (dannygarside@outlook.com), Hannah Selwyn¹, Neha Sriram¹, Alexis Green¹, Josh Fuller-Deets¹, Bevil Conway¹; ¹National Eye Institute, National Institutes of Health

43.452 Effective Prioritization of Temporal Groups in Visual Working Memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Joyce Tam¹ (joyce.m.y.tam@gmail.com), Brad Wyble¹; ¹Penn State University

43.453 The effects of saccades on visual working memory representations

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Golnaz Forouzandehfar¹ (gforouz@vols.utk.edu), Garrett Hensley¹, A. Caglar Tas¹; ¹University of Tennessee,

Knoxville

43.454 When "Looking at Nothing" Imparts Something: Gaze Retro-cues Flexibly Direct Prioritization in Visual Working Memory

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Yingchao Zhang¹ (zhangych87@mail2.sysu.edu.cn), Shujuan Ye¹, Wei Chen¹, Xiaowei Ding¹; ¹Department of Psychology, Guangdong Provincial Key Laboratory of Social Cognitive Neuroscience and Mental Health, Sun Yat-sen University, Guangzhou, People's Republic of China

43.455 The Role of Report History in Attribute Amnesia

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Niya Yan¹ (yanniya@tamu.edu), Brian Anderson; ¹Texas A&M University

43.456 Visual guessing relies on metacognitive reasoning

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Caroline Myers¹ (cmyers60@jhu.edu), Chaz Firestone¹, Justin Halberda¹; ¹Johns Hopkins University

43.457 Introducing ART: a new method of testing auditory memory with circular reproduction tasks

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Daryl Fougne¹ (darylougne@gmail.com), Aytac Karabay¹, Rob Nijenkamp², Anastasios Sarampalis³; ¹Department of Psychology, New York University Abu Dhabi, ²Center for Information Technology, University of Groningen, ³Department of Psychology, University of Groningen

43.458 What memories are formed by dynamic 'visual routines'?

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Kimberly W. Wong¹ (kimberly.wong@yale.edu), Brian Scholl¹; ¹Yale University

Multisensory Processing: Audio-visual, visuo-vestibular

43.459 The impact of gaze behavior on attentional disruptions to multisensory speech perception

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Leslie Kwakye¹ (lkwakye@oberlin.edu), Arohi Dandawate¹, Ankit Barana¹, Sarah Liberatore¹, Victoria Fisher¹, Gabriel Hosein¹, Andrea Orozco¹; ¹Oberlin College

43.460 Comparing the consistency and determinants of visual and auditory memorability

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Cambria Revsine¹ (crevsine@uchicago.edu), Wilma A. Bainbridge¹; ¹University of Chicago

43.461 Audiovisual multisensory Event Related Potentials using the McGurk effect as a stimulation paradigm

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Jonathon Toft-Nielsen^{1,2,3} (jtoftnielsen@jorvec.com), Rafael Delgado^{1,2,3}, Özcan Özdamar³; ¹JÖRVEC Corp, ²Intelligent Hearing Systems Corp, ³University of Miami, Department of Biomedical Engineering

43.462 The Audiovisual Rabbit Illusion with Illusory Contours

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Matilda Cederblad¹ (amcederb@caltech.edu), Armand R. Tanguay, Jr.^{1,2}, Shinsuke Shimojo¹, Noelle R. B. Stiles^{1,3}; ¹California Institute of Technology, Division of Biology and Biological Engineering, ²University of Southern California, Departments of Electrical Engineering, Chemical Engineering and Materials Science, Biomedical Engineering, Ophthalmology, and Physics and Astronomy; Neuroscience Graduate Program, ³University of Southern California, Department of Ophthalmology

43.463 Making the Invisible Visible: Crossmodal Perception in Patients with Low Vision

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Ailene Y. C. Chan¹ (chanyc@caltech.edu), Noelle R. B. Stiles^{1,2}, Armand R. Tanguay, Jr.^{1,3}, Shinsuke Shimojo¹; ¹California Institute of Technology, Division of Biology and Biological Engineering, ²University of Southern California, Department of Ophthalmology, ³University of Southern California, Departments of Electrical Engineering, Chemical Engineering and Materials Science, Biomedical Engineering, Ophthalmology, and Physics and Astronomy; Neuroscience Graduate Program

43.464 Can Implicit Auditory Motion Affect Visual Motion?

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Lara Kriszt¹ (lkriszt@caltech.edu), Daw-An Wu¹, Shinsuke Shimojo¹; ¹Caltech

43.465 Cross-modal feature based attention facilitates spatial transfer of perceptual learning in motion-domain figure-ground segregation

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Catherine A. Fromm¹ (caf8588@rit.edu), Krystel R. Huxlin^{2,3}, Gabriel J. Diaz^{1,3}; ¹Rochester Institute of Technology Center for Imaging Science, ²Flaum Eye Institute, University of Rochester Medical Center, ³University of Rochester Center for Visual Science

43.466 Multisensory Training Rehabilitates Hemianopia

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Benjamin Rowland¹ (browland@wakehealth.edu), Barry Stein¹; ¹Wake Forest School of Medicine

43.467 The role of motor and auditory predictive cues in modulating neural processing of predicted visual stimuli

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Batel Buaron¹, Roy Mukamel¹; ¹Tel Aviv University

43.468 Restricting the Distribution of Visual Attention Reduces Cybersickness

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Sai Ho Yip¹, Jeffrey Saunders¹; ¹University of Hong Kong

43.469 Synchronicity of visual and vestibular signals modulates the causal inference in

heading direction estimation

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Liana Nafisa Saftari¹, Jongmin Moon¹, Oh-Sang Kwon¹; ¹Ulsan National Institute of Science and Technology

43.470 Cue Combination in Visual and Vestibular Perception of Subjective Vertical

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Chela Willey¹ (chela.willey@lmu.edu), Zili Liu²; ¹Loyola Marymount University, ²University of California, Los Angeles

43.471 Rotational self-motion inhibits opposed visual motion

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Kate Pickard¹ (kp1c0319@uni.sydney.edu.au), Sujin Kim¹, Robert Keys¹, Frans Verstraten¹, David Alais¹; ¹University of Sydney

43.472 Causal inference modulates audiovisual temporal recalibration

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Luhe Li¹ (ll3981@nyu.edu), Fangfang Hong¹, Stephanie Badde², Michael S. Landy^{1,3}; ¹Department of Psychology, New York University, ²Department of Psychology, Tufts University, ³Center for Neural Science, New York University

43.473 Training of visual attentional tracking modulates fronto-parietal activation and cross-modal GABAergic suppression

Monday, May 22, 2023, 8:30 am – 12:30 pm, Pavilion

Sebastian Frank¹ (cal.sebastian@gmail.com), Markus Becker¹, Ekaterina-Rita Hegmann¹, Sonja Hartl¹, Ayumi Sarah Wandl¹, Mark Greenlee¹; ¹University of Regensburg

Tuesday Morning Posters in Banyan Breezeway

Color, Light, and Materials: Neural mechanisms, models

53.301 Spatial and chromatic sensitivity of the primary visual cortex at the center-of-gaze

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Felix Bartsch^{1,2} (felixbartsch@gmail.com), Ramon Bartolo Orozco², Jacob L Yates³, Cole Saborio¹, Daniel A. Butts¹, Bevil R. Conway²; ¹Program in Neuroscience and Cognitive Science, University of Maryland, ²Laboratory of Sensorimotor Research, National Eye Institute, National Institutes of Health, ³Herbert Wertheim School of Optometry and Vision Science, UC Berkeley,

53.303 Orientation and color tuning in macaque V4

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Dan-Qing Jiang¹, Xing-Nan Zhao¹, Sheng-Hui Zhang¹, Shi-Ming Tang^{1,3,4}, Cong Yu^{1,2,4}; ¹PKU-Tsinghua Center for Life Sciences, Peking University, Beijing 100181, China, ²School of Psychology and Cognitive Sciences, Peking University, Beijing 100181, China, ³School of Life Sciences, Peking University, Beijing 100181, China, ⁴IDG-

McGovern Institute for Brain Research, Peking University, Beijing 100181, China

53.304 Examining Hering's theory for color responses in human V1 and V4

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

William Narhi-Martinez¹ (narhi-martinez.1@osu.edu), Zitong Lu¹, Angela M. Brown¹, Julie D. Golomb¹, Delwin T. Lindsey¹; ¹The Ohio State University

53.305 Hue-dependence of contextual influences in color vision explained by a non-uniform population code

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Felix Schrader¹ (felix.schrader@campus.lmu.de), Thomas Wachtler¹; ¹Faculty of Biology, Ludwig-Maximilians-Universität München, Planegg-Martinsried, Germany.

53.306 Predicting performance of diverse color vision genotypes of wild primates when foraging for food.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Max Snodderly¹ (dmsnodderly@gmail.com), Delisa Ramos¹, Andres Link², Anthony Di Fiore¹; ¹University of Texas at Austin, ²Universidad de los Andes-Colombia

53.307 The Pattern electroretinogram as an indirect measure of central dopamine

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Michael Wenger¹ (michael.j.wenger@ou.edu), Sarah Newbolds¹, Abigail Hays¹, Laili Boozary¹, Amy Barnett¹; ¹The University of Oklahoma

Perceptual Organization: Segmentation, grouping, similarity

53.308 How object segmentation and perceptual grouping emerge in noisy variational autoencoders

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ben Lonnqvist¹ (ben.lonnqvist@epfl.ch), Zhengqing Wu¹, Michael H. Herzog¹; ¹EPFL (École Polytechnique Fédérale de Lausanne), Switzerland

53.309 Center-Surround Inhibition in Expectation

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ling Huang¹ (2018022906@m.scnu.edu.cn), xilin zhang²; ¹South China Normal University, ²School of Psychology

53.310 Temporal limits of visual segmentation based on temporal asynchrony in luminance, color, motion direction, and their mixtures

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yen-Ju Chen¹ (ra51011daniel@gmail.com), Shin'ya Nishida^{1,2}; ¹Graduate School of Informatics, Kyoto University, Japan, ²Human Information Science Laboratory, NTT Communication Science Laboratories, Nippon Telegraph and Telephone Corporation, Japan

53.311 A Bayesian efficient observer model to explain attractive and repulsive temporal context effects when perceiving multistable dot lattices

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Eline Van Geert¹ (eline.vangeert@kuleuven.be), Tina Ivančir¹, Johan Wagemans¹; ¹KU Leuven, Belgium

53.312 From dyads to crowds: Perceptual unity of group interactions.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jelena Ristic¹ (jelena.ristic@mcgill.ca), Clara Colombatto², Luowei Yan¹; ¹Department of Psychology McGill University, Montreal, Quebec, Canada, ²Department of Experimental Psychology, University College London, London, United Kingdom

53.313 Integration of Scrambled Halves of Chinese Characters

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Sherry Zhang¹ (sherryzh@usc.edu), Jack Morrison², Tailai Shen¹, Ernest Greene¹; ¹University of Southern California, ²Neuropsychology Foundation

53.314 Similarity Binds (and Bends) the Perception of Objects

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Gorkem Er¹ (gorkemerr@gmail.com), Tim Sweeny¹; ¹University of Denver

53.315 The effect of stimulus similarity in the Eriksen Flanker Task

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Danai Papadaki¹ (d.papadaki.19@abdn.ac.uk), Ramakrishna Chakravarthi¹, Søren K. Andersen^{1,2}; ¹School of Psychology, University of Aberdeen, UK, ²Department of Psychology, University of Southern Denmark, Denmark

Face Perception: Models

53.317 Erring on the side of caution: The influence of base rates, payoffs, and discriminability on face identification performance.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kristen A. Baker¹, Vincent J. Stabile², Catherine J. Mondloch¹; ¹Brock University, ²Oakland University

53.318 Extrafoveal faces modulate the dynamics of scene viewing

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Petra Borovska¹ (petra.borovska@psychol.uni-giessen.de), Benjamin de Haas¹; ¹Justus-Liebig-University Giessen

53.319 Intensive fMRI scanning and computational models can provide insight into the neural basis of developmental prosopagnosia

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Subha Nower Pushpita³ (snpushpi@mit.edu), Elizabeth Mieczkowski¹, Bradley Duchaine⁴, N. Apurva Ratan Murty^{1,2,5}; ¹Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, ²Center for Brains, Minds and Machines, Massachusetts Institute of Technology, ³Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology, ⁴Department of Psychological and Brain Sciences, Dartmouth College, ⁵McGovern Institute for Brain Research, Massachusetts Institute of Technology

53.320 Prediction of preference judgments of face images using facial expressions and

EEG signals

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Satoshi Shioiri¹ (shioiri@riec.tohoku.ac.jp), Hikaru Nagata², Yoshiyuki Sato³, Yasuhiro Hatori⁴; ¹Tohoku University

53.321 Comparison of regression techniques to predict attractiveness from facial colour cues

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yan Lu¹ (sdyl@leeds.ac.uk), Kaida Xiao^{1,2}, Jie Yang³, Michael Pointer¹, Changjun Li², Sophie Wuerger⁴; ¹Leeds Institute of Textile and Colour, University of Leeds, ²University of Science and Technology Liaoning, ³Beijing Institute of Graphic Communication, ⁴University of Liverpool

53.322 Reconstructing facial motion across views using a multi-view face space.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ryan Elson¹ (ryan.elson@nottingham.ac.uk), Denis Schluppeck¹, Alan Johnston¹; ¹University of Nottingham, UK

53.323 The Latent Decision Variable Underlying Confidence in Lineup Rejections

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Anne Yilmaz¹ (a1yilmaz@ucsd.edu), John Wixted¹; ¹University of California, San Diego

Face Perception: Neural mechanisms

53.324 The causal link between neural activity in inferotemporal cortex and free viewing eye movements

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Reza Azadi¹, Emily Lopez¹, Jessica Taubert^{2,3}, Amanda Patterson², Arash Afraz¹; ¹Laboratory of Neuropsychology, National Institute of Mental Health, Bethesda, MD 20892, USA, ²Laboratory of Brain and Cognition, National Institute of Mental Health, Bethesda, MD 20892, USA, ³School of Psychology, The University of Queensland, Brisbane, QLD 4072, Australia

53.325 Is the processing of facial expression and head orientation dissociated in the human brain?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kyla Brannigan¹, Rohini Kumar¹, Hannah Wild¹, Shivani Goyal¹, Chris Baker¹, Jessica Taubert^{1,2}, Shruti Japee¹; ¹Laboratory of Brain and Cognition, NIMH, NIH, ²University of Queensland

53.326 An electrophysiological investigation of facial race and identity decoding

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Moaz Shoura¹ (moaz.shoura@mail.utoronto.ca), Marco A. Sama¹, Arijit De¹, Sophie Zhou¹, Adrian Nestor¹; ¹University of Toronto Scarborough

53.327 Do visual mental imagery and exteroceptive perception rely on the same mechanisms?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Catherine Landry¹, Jasper JF van den Bosch², Ian Charest^{1,2}, Frédéric Gosselin¹, Vincent Taschereau-Dumouchel^{3,4}; ¹Cerebrum, Département de psychologie, Université de Montréal, ²Centre for Human Brain Health, School of Psychology, University of Birmingham, ³Département de psychiatrie et d'addictologie, Université de Montréal, ⁴Centre de Recherche de l'Institut Universitaire en Santé Mentale de Montréal, Montréal

53.328 Early neural dehumanization of other race faces

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Justin Duncan¹ (justin.duncan@uqo.ca), Marie-Pier Plouffe-Demers^{1,2}, Émilie St-Pierre¹, Caroline Blais¹, Daniel Fiset¹; ¹Université du Québec en Outaouais, ²Université du Québec à Montréal

53.329 Interaction vs observation mode in the macaque visual cortex.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jessica Taubert^{1,2} (jesstaubert@gmail.com), Shruti Japee², Amanda Patterson², Eliza Bliss-Moreau³; ¹The School of Psychology, The University of Queensland, QLD Australia, ²The Laboratory of Brain and Cognition, The National Institute of Mental Health, MD United States., ³Department of Psychology, The University of California, Davis, CA United States.

53.330 Low beta oscillations encode serial bias in face-gender discrimination

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Giacomo Ranieri¹, David C Burr¹, Maria Concetta Morrone²; ¹University of Florence, ²University of Pisa

53.331 Temporal dynamics of facial identity and expression processing from magnetoencephalography

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Rohini Kumar¹, Kyla Brannigan¹, Lina Teichmann¹, Chris Baker¹, Shruti Japee¹; ¹Laboratory of Brain and Cognition, NIMH, NIH

53.332 N250 amplitude is driven by the eyes in mid-to-high spatial frequencies

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Vicki Ledrou-Paquet¹ (ledv07@uqo.ca), Isabelle Charbonneau¹, Justin Duncan¹, Caroline Blais¹, Daniel Fiset¹; ¹Département de Psychoéducation et de Psychologie, Université du Québec en Outaouais

53.333 Parametric study of N170 sensitivity to diagnostic facial information during face identification

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Pierre-Louis Audette¹, Justin Duncan¹, Caroline Blais¹, Daniel Fiset¹; ¹Université du Québec en Outaouais

53.334 Unconscious perception of race shapes conscious race categorization in the brain

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Peter de Lissa¹ (peter.delissa@unifr.ch), Pauline Schaller¹, Viola Benedetti², Roberto Caldara¹; ¹University of Fribourg, ²University of Florence

53.335 Establishing functional homology across species using a common set of natural

images

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kasper Vinken¹, Saloni Sharma¹, Margaret Livingstone¹; ¹Harvard Medical School

53.336 3D Faces Evoke Stronger fMRI Activation than 2D Faces

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Eva Deligiannis^{1,2} (edeligia@uwo.ca), Marisa Donnelly², Carol Coricelli^{2,3}, Karsten Babin², Kevin Stubbs^{2,4}, Chelsea Ekstrand⁵, Laurie M. Wilcox⁶, Jody C. Culham^{1,2}; ¹Neuroscience Program, Western University, Canada, ²Brain and Mind at Western, Western University, Canada, ³German Institute of Human Nutrition, Potsdam-Rehbrücke, Germany, ⁴BrainsCAN, Western University, Canada, ⁵Canadian Centre for Behavioural Neuroscience, University of Lethbridge, Canada, ⁶Centre for Vision Research, York University

53.337 Revealing interpretable object dimensions from a high-throughput model of the fusiform face area

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Oliver Contier^{1,2}, Shu Fujimori^{1,3}, Katja Seeliger¹, N Apurva Ratan Murty^{4,5}, Martin Hebart^{1,6}; ¹Vision and Computational Cognition Group, Max Planck Institute for Human Cognitive and Brain Sciences, ²Max Planck School of Cognition, Max Planck Institute for Human Cognitive and Brain Sciences, ³Department of Mechanical and Intelligent Systems Engineering, Graduate School of Informatics and Engineering, The University of Electro-Communications, ⁴McGovern Institute for Brain Research, Massachusetts Institute of Technology, ⁵Department of Brain and Cognitive Science, Massachusetts Institute of Technology, ⁶Department of Medicine, Justus Liebig University

53.338 Bidirectional and parallel relationships in macaque face circuit revealed by fMRI and causal pharmacological inactivation

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Marlene Behrmann¹ (mbehrmann@pitt.edu), Galia Avidan², Janita N. Turchi³, Fadila Hadj-Bouziane⁴, Ning Liu⁵; ¹Department of Ophthalmology, University of Pittsburgh, and Carnegie Mellon University, Pittsburgh, Pennsylvania, 15213 USA, ²Department of Psychology, Ben-Gurion University of the Negev, Beer-Sheva 8410501, Israel, ³Laboratory of Neuropsychology, NIMH, NIH, Bethesda, Maryland, 20892, USA, ⁴INSERM, U1028, CNRS UMR5292, Lyon Neuroscience Research Center, ImpAct Team, Lyon, F-69000, France, ⁵State Key Laboratory of Brain and Cognitive Science, Institute of Biophysics, Chinese Academy of Sciences, Beijing, 100101, China

Scene Perception: Categorization, memory, cognition

53.339 Understanding Novel Real World Scenes: Gist, Elaboration, and Uniqueness

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Khoa Nguyen¹ (khoa2@usf.edu), Jong Han Lee¹, Reilly Orman¹, Lewis Evans¹, Eve Felicien Griffith¹, Thomas Sanocki¹; ¹University of South Florida

53.340 The role of object and spatial layout in scene integration

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Girim Yoon¹ (yoongr@yonsei.ac.kr), Soojin Park¹; ¹Department of Psychology, Yonsei University

53.341 Mainly the actions: Functional knowledge has a primary role in understanding real-world scenes portrayed by either fine or coarse visual information

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Krystian Ciesielski¹, Andrew Webb², Sara Spotorno³; ¹School of Psychology, Keele University, UK, ²Department of Computational Neuroscience, Max Planck Institute for Biological Cybernetics, Tübingen, Germany, ³Psychology Department, Durham University, UK

53.342 Complexity & Memorability have a Nonlinear Relationship when Remembering Scenes

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Cameron Kyle-Davidson¹ (ckd505@york.ac.uk), Karla K. Evans¹; ¹University of York

53.343 Memorable Scenes Attract Attention in Visual Search

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yoshiyuki Ueda¹ (ueda.yoshiyuki.3e@kyoto-u.ac.jp), Qi Li², Yuichiro Kikuno³; ¹Kyoto University, ²Okayama University, ³Kyoto Notre Dame University

53.344 Musically induced microvalences in high-level visual processing of everyday scenes

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Elizabeth Galbo¹, Nathan Lincoln-DeCusatis¹, Elissa M. Aminoff¹; ¹Fordham University

Scene Perception: Neural mechanisms

53.345 Evidence that noise in human visual cortex encodes naturalistic visual representations

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Thomas Naselaris¹ (nase0005@umn.edu), Ghislain St-Yves¹, Kendrick Kay¹; ¹University of Minnesota

53.346 An encoding model in shared functional space to reconstruct representations in multiple datasets

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Laurent Caplette¹ (laurent.caplette@yale.edu), Nicholas B. Turk-Browne¹; ¹Yale University

53.347 Orientation-dependent Modulation of Primary Visual Cortex to Near Surrounds Differs from Perceived Suppression

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Victor Pokorný¹ (vpokorny123@gmail.com), Scott Sponheim^{1,2}, Cheryl Olman¹; ¹University of Minnesota, ²Minneapolis VA Medical Center

53.348 The Spatiotemporal Dynamics of Goal-driven Efficient-coding Revealed Through Brain-supervised Sparse Code Mapping

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Bruce Hansen¹ (bchansen@colgate.edu), Michelle Greene², David Field³; ¹Colgate University, ²Bates College,

³Cornell University

53.349 Combined representation of mid-level visual features in the scene-selective cortex

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jisu Kang¹, Soojin Park¹; ¹Department of Psychology, Yonsei University

53.350 Representation of event boundaries in the first-person navigation

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Byunghoon Choi¹, Donald Shi Pui Li², Soojin Park¹; ¹Yonsei University, ²Johns Hopkins University

53.351 Scene- and object-based tasks performed on the same complex stimuli activate different regions in parietal and lateral occipital cortex.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Mark D. Lescroart¹, Hunter Howe¹; ¹University of Nevada, Reno

53.352 What does it mean to be a scene: evidence from full-field fMRI

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jeongho Park¹ (jpark3@g.harvard.edu), Talia Konkle¹; ¹Harvard University

53.353 Reconstructing mental images using Bubbles and electroencephalography

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Audrey Lamy-Proulx¹, Jasper van den Bosch², Catherine Landry¹, Peter Brotherwood¹, Vincent Taschereau-Dumouchel^{3,4}, Frédéric Gosselin¹, Ian Charest^{1,2}; ¹Cerebrum, Université de Montréal, ²Centre for Human Brain Health, University of Birmingham, ³Département de psychiatrie et d'addictologie, Université de Montréal, ⁴Centre de Recherche de l'Institut Universitaire en Santé Mentale de Montréal

53.354 Dissociable mechanisms for integrating views into places in scene-selective cortex

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Linfeng Tony Han¹ (hanlf@sas.upenn.edu), Russell A. Epstein¹; ¹University of Pennsylvania

53.355 Revealing the locus and content of behaviorally relevant information about real-world scenes in human visual cortex

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Johannes Singer¹ (johannes.singer@arcor.de), Agnessa Karapetian^{1,2,3}, Martin Hebart^{4,5}, Radoslaw Cichy^{1,2,3}; ¹Department of Education and Psychology, Freie Universität Berlin, Germany, ²Charité – Universitätsmedizin Berlin, Einstein Center for Neurosciences Berlin, Berlin, Germany, ³Bernstein Centre for Computational Neuroscience Berlin, Berlin, Germany, ⁴Vision and Computational Cognition Group, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany, ⁵Department of Medicine, Justus-Liebig-Universität Gießen, Germany

53.356 Scene representations underlying categorization behaviour emerge 100 to 200 ms after stimulus onset

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Agnessa Karapetian^{1,2,3} (agnessakarapetian@gmail.com), Antoniya Boyanova¹, Muthukumar Pandaram³, Klaus Obermayer^{2,3,4,5}, Tim C. Kietzmann⁶, Radoslaw M. Cichy^{1,2,3,5}; ¹Freie Universitaet Berlin, Germany, ²Einstein Center for Neurosciences Berlin, Germany, ³Bernstein Centre for Computational Neuroscience Berlin, Germany, ⁴Technische Universitaet Berlin, Germany, ⁵Berlin School of Mind and Brain, Germany, ⁶Universitaet Osnabrueck, Germany

53.357 Is Attention Necessary for the Representational Advantage of Good Exemplars over Bad Exemplars?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Zhenan Shao^{1,2} (zhenans2@illinois.edu), Diane M. Beck^{1,2}; ¹Department of Psychology, University of Illinois Urbana-Champaign, ²Beckman Institute, University of Illinois Urbana-Champaign

53.358 Exploring Similarities in Human and Macaque Representational Structure using fMRI

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kurt Braunlich¹ (kurt.braunlich@nih.gov), Marianne Duyck¹, Kyle Behel¹, Stuart Duffield¹, Bevil Conway¹, Chris Baker¹; ¹NIH

Visual Search: Scenes and other natural environments

53.359 Investigating the effects of a virtual reality vs. screen-based testing setup on incidental memory after visual search through scenes

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Julia Beitner¹ (beitner@psych.uni-frankfurt.de), Jason Helbing¹, Erwan J. David¹, Melissa L.-H. Vo¹; ¹Scene Grammar Lab, Goethe University Frankfurt

53.360 Feature integration in visual search for real-world scenes

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Gaeun Son¹ (gaeun.son@mail.utoronto.ca), Michael L. Mack, Dirk B. Walther; ¹University of Toronto

53.361 Searching near and far: The attentional template incorporates viewing distance

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Surya Gayet^{1,2} (surya.gayet@gmail.com), Elisa Battistoni³, Sushrut Thorat^{1,4}, Marius Peelen¹; ¹Donders Institute for Brain, Cognition and Behaviour, Radboud University, Nijmegen, The Netherlands, ²Helmholtz Institute, Experimental Psychology, Utrecht University, Utrecht, The Netherlands, ³Center for Mind/Brain Sciences, University of Trento, Rovereto, Italy, ⁴Institute of Cognitive Science, Osnabrück University, Osnabrück, Germany

53.362 Active visual search in a 3D real world environment

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Tiffany Wu¹ (tiffwu1027@gmail.com), John K. Tsotsos¹; ¹York University, Toronto, Canada

53.363 Probing Satisfaction of Search Using a Laboratory Analog of Medical Image Analysis

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Andrew Hollingworth¹ (andrew-hollingworth@uiowa.edu), Zexuan Niu¹, Cathleen M. Moore¹, Claudia Mello-Thoms²; ¹The University of Iowa, Department of Psychological and Brain Sciences, ²The University of Iowa, Department of Radiology

53.364 Visual Selection Interacts With Action Planning in Natural Foraging Tasks

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Danilo A. Kuhn¹ (danilo.kuhn@uni-marburg.de), Jan Tünnermann¹, Anna Schubö¹; ¹Philipps-University Marburg

53.365 The semantic distance between a linguistic prime and a natural scene target predicts reaction times in a visual search experiment

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Katerina Marie Simkova¹ (kms863@student.bham.ac.uk), Jasper JF van den Bosch¹, Damiano Grignolio¹, Clayton Hickey¹, Ian Charest²; ¹CHBH, School of Psychology, University of Birmingham, ²cerebrUM, Département de Psychologie, Université de Montréal

53.366 Comparing Neural Networks and Human Subjects in Assessing Trademark Similarities

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Shinsuke Shimojo¹ (sshimojo@caltech.edu), Filip-Mihai Toma¹, Masaiko Noguchi¹, Elijah Cole¹, Markus Marks¹, Mohammad Shehata^{1,2}, Daw-An Wu¹; ¹California Institute of Technology, ²Toyohashi University of Technology

53.367 Rare vs. Frequent Target Search in 2D and Segmented-3D Searches

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Stephen Adamo¹; ¹University of Central Florida

53.368 Using computer-simulated lung nodules to evaluate the effects of prevalence rate on perceptual learning of lung nodule detection in initially naïve observers

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Frank Tong^{1,2} (frank.tong@vanderbilt.edu), Hui-Yuan Miao¹, Hojin Jang^{1,3}, Edwin Donnelly⁴; ¹Psychology Department, Vanderbilt University, ²Vanderbilt Vision Research Center, Vanderbilt University, ³Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, ⁴Department of Radiology, Ohio State Wexner Medical Center

53.369 Just look away: Could attention allocation to scene grammar violations during unrelated object searches be modulated by individual differences in language experience?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Naomi Vingron¹ (naomi.vingron@mail.mcgill.ca), Melissa Vo¹; ¹Scene Grammar Lab, Department of Psychology, Goethe University, Frankfurt am Main, Germany

53.370 Predictions benefit performance in dynamic search across the adult lifespan

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nir Shalev¹ (nir.shalev@wolfson.ox.ac.uk), Sage Boettcher², Anna Christina Nobre³; ¹University of Oxford

Tuesday Morning Posters in Pavilion

Development: Perception and cognition

53.401 Development of navigational affordance perception in infancy

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Frederik Kamps¹ (fkamps@mit.edu), Emily Chen², Adele Mah³, Stephanie Washburn⁴, Nancy Kanwisher⁵, Rebecca Saxe⁶; ¹Massachusetts Institute of Technology

53.402 A novel eye-tracking task to assess mental rotation from infancy to early childhood

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Aaron Beckner¹ (agb222@cornell.edu), Mary Simpson¹, David Tompkins¹, Vanessa LoBue², Lisa Oakes³, Marianella Casasola¹; ¹Cornell University, ²Rutgers University, ³UC Davis

53.403 Investigating the neural analog-to-symbolic shift in 5- to 7-year-old childrens' numerical cognition

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Caroline M. Kaicher¹ (ckaicher@andrew.cmu.edu), Lauren S. Aulet¹, Jessica F. Cantlon¹; ¹Carnegie Mellon University

53.404 Neurocognitive mechanisms of attentional control development

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Aaron Buss¹ (aarontbuss@gmail.com), Alexis McCraw¹, Kara Lowery¹, Hollis Heim¹, Rachel Eddings¹, Jacqueline Sullivan¹; ¹University of Tennessee, Knoxville

53.405 Assessing Visual Short-Term Memory in 5- to 12-Month-Old Infants Using an Eye-Tracking Change-Localization Task at Set Sizes Three and Four

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Van T. Pham¹ (vttpham@ucdavis.edu), Michaela C. DeBolt¹, Aaron G. Beckner², Lisa M. Oakes¹; ¹University of California, Davis, ²Cornell University

53.406 Associations Among Attention, Child Temperament, and Resting State Connectivity

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Jacqueline Sullivan¹, Kara Lowery¹, Rachel Eddings¹, Aaron Buss¹; ¹University of Tennessee, Knoxville

53.407 Differential development of object and location processing is a critical factor to a child's passing or failing explicit false-belief tasks

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Rebecca J. Rennert¹ (rebecca.rennert@emory.edu), Virginia J. Chambers¹, Daniel D. Dilks¹; ¹Emory University

53.408 Young Children's Cost-dependent Tradeoff Between Looking and Remembering

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Yibiao Liang¹ (yibiao.liang001@umb.edu), Zsuzsa Kaldy¹, Erik Blaser¹; ¹University of Massachusetts Boston

53.409 Social Attribution Behavior in Newly Sighted Children.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Dhun Verma¹, Mrinalini Yadav¹, Priti Gupta⁴, Chetan Ralekar³, Shlomit Ben-Ami⁶, Sharon Gilad-Gutnick³, Seth Riskin³, Flip Phillips⁵, Kimiya Jazayeri⁷, Suma Ganesh², Pawan Sinha³; ¹Project Prakash, Dr Shroff's Charity Eye Hospital, New Delhi, ²Department of Paediatric Ophthalmology, Dr Shroff's Charity Eye Hospital, New Delhi, ³Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, USA, ⁴Amarnath and Shashi Khosla School of Information Technology, IIT, Delhi, ⁵MAGIC Center, Rochester Institute of Technology, Rochester, NY, USA, ⁶Sagol School of Neuroscience, School of Psychological Sciences, Tel-Aviv University, Tel-Aviv, Israel, ⁷Brookline High School, Brookline, MA, USA

53.410 A quantitative method for localizing RMS contrast in egocentric images

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Evelina E Dineva¹, Eric S Seemiller², T Rowan Candy¹, Linda B Smith¹; ¹Indiana University, ²Air Force Research Laboratory

53.411 Photophobia and Poor Night Vision are the Most Disruptive Symptoms of Visual Snow Syndrome

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Carter B. Mulder¹ (mulde109@umn.edu), Samantha A. Montoya², Michael S. Lee³, Stephen A. Engel⁴, Michael-Paul Schallmo¹; ¹University of Minnesota, Department of Psychiatry and Behavioral Sciences, ²University of Minnesota, Graduate Program in Neuroscience, ³University of Minnesota, Department of Ophthalmology and Visual Neurosciences, ⁴University of Minnesota, Department of Psychology

Spatial Vision: Models and image statistics

53.412 Covariance between similarly tuned populations in human visual cortex is model-dependent

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Josh Wilson¹ (joshmw@stanford.edu), Justin Gardner¹; ¹Stanford University

53.413 Evaluating Pyramid-Based Image Statistics Using Contrastive Learning

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Vasha DuTell^{1,2} (vashadutell@gmail.com), William Freeman¹, Ruth Rosenholtz^{1,2}; ¹MIT CSAIL, ²MIT Brain and Cognitive Sciences

53.414 Statistical characterization of medical images of bone

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Elena Ajayi^{1,2} (elenaajayi@outlook.com), Jonathan Victor²; ¹St. John's University, ²Weill Cornell Medical College

53.415 When do contrast sensitivity impairments (or enhancements) depend on spatial frequency? Two ways to avoid spurious interactions.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Howard Bi¹ (howardbi97@gmail.com), Yonatan Abrham¹, Pamela Butler^{2,3}, Boyang Hu¹, Brian Keane¹;

¹University of Rochester, ²Nathan S. Kline Institute for Psychiatric Research, ³New York University School of Medicine

53.416 A image gradient approach to perceptual metric space

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Alan Johnston¹; ¹University of Nottingham

53.417 Elucidating the relationship between spatial summation and center-surround antagonism

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Christopher Wu¹, Daniel Coates¹; ¹University of Houston, College of Optometry

53.418 Cortically motivated recurrence enables visual task extrapolation

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Vijay Veerabadrán¹ (vveeraba@ucsd.edu), Yuan Tang¹, Ritik Raina¹, Virginia de Sa¹; ¹University of California - San Diego

53.419 Is edge sensitivity more than contrast sensitivity?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Lynn Schmittwilken¹ (l.schmittwilken@tu-berlin.de), Felix A. Wichmann², Marianne Maertens¹; ¹Technical University Berlin, ²University of Tuebingen

53.420 Non-parametric Hierarchical Bayesian Modeling of the Contrast Sensitivity Function

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Yukai Zhao¹ (zhaoyukai@nyu.edu), Luis Andres Lesmes², Michael Dorr², Zhong-Lin Lu^{1,3}; ¹New York University, ²Adaptive Sensory Technology Inc., ³NYU Shanghai

53.421 Foveated metamers of the early visual system

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

William F. Broderick¹ (billbrod@gmail.com), Gizem Rufo², Jonathan Winawer³, Eero P. Simoncelli^{1,3}; ¹Flatiron Institute, ²Meta, Inc., ³New York University

53.422 An image-computable spatial receptive field model of the midget retinal ganglion cell mosaic

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Nicolas Cottaris¹ (cottaris@upenn.edu), Brian Wandell², David Brainard¹; ¹University of Pennsylvania, Department of Psychology, ²Stanford University, Department of Psychology

53.423 An Image-Computable Model of Orientation-Tuned Normalization

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Ilona Bloem¹ (ibloem@nyu.edu), Iris Groen², Kenichi Yuasa¹, Giovanni Piantoni³, Stephanie Montenegro⁴, Adeen Flinker⁴, Sasha Devore⁴, Orrin Devinsky⁴, Werner Doyle⁴, Patricia Dugan⁴, Daniel Friedman⁴, Nick Ramsey³,

Michael Landy¹, Natalia Petridou³, Jonathan Winawer¹; ¹New York University, ²University of Amsterdam, ³University Medical Center Utrecht, ⁴New York University School of Medicine

53.424 How does perceptual discrimination relate to neuronal receptive fields?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Jingyang Zhou^{1,2} (jyz205@nyu.edu), Chanwoo Chung^{2,3}; ¹Flatiron Institute, ²New York University, ³Weill Cornell Medicine of Cornell University

53.425 Plenoptic: A platform for synthesizing model-optimized visual stimuli

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Lyndon Duong¹, Kathryn Bonnen², William Broderick³, Pierre-Étienne Fiquet¹, Nikhil Parthasarathy¹, Thomas Yerxa¹, Xinyuan Zhao¹, Eero Simoncelli^{1,3}; ¹New York University, ²Indiana University, ³Flatiron Institute

Motion: Higher-order

53.426 A new approach for the study of visual orientation perception and decisions

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Ying Lin^{1,2} (ylin78@ur.rochester.edu), Jose Reynoso^{1,2,3}, Zhen Chen^{1,2}, Ralf Haefner^{1,2}, Dujie Tadin^{1,2}; ¹University of Rochester, ²Center for Visual Science, ³School of Medicine and Dentistry

53.427 A rolling illusion counter to sensory signals and physical plausibility

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Akihito Maruya¹ (user3098@sunyopt.edu), Qasim Zaidi²; ¹State University of New York, College of Optometry

53.428 Does the Aubert-Fleischl phenomenon affect perceived object speed in realistic virtual scenes?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Bjoern Joerges¹ (bjoerges@yorku.ca), Laurence R. Harris¹; ¹Center for Vision Research, York University

53.429 Occluders help estimate time-to-contact in motion prediction tasks

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Cristina de la Malla¹ (c.delamalla@ub.edu), Pamela Villavicencio¹, Joan López-Moliner¹; ¹Vision and Control of Action (VISCA) Group, Department of Cognition, Development and Psychology of Education, Institute of Neurosciences, Universitat de Barcelona, Spain

53.430 The frame effect is suppressed for stationary probes.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Patrick Cavanagh¹ (patcav1@yorku.ca), Stuart Anstis²; ¹Glendon College and CVR, York University, ²UCSD

53.431 What motion information can be retained within iconic memory?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Remy Allard¹ (remy.allard@umontreal.ca), Yara Mohiar¹; ¹Universite de Montreal

53.433 Like a Moth to the Flame: Visual Sensitivity to 2D and 3D Renderings of Growing

Fires

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Micah D. Russell¹, Justin W. Bonny¹, Arnaud Trouvé², James A. Milke²; ¹Morgan State University, ²University of Maryland, College Park

53.434 Transformational Apparent Motion In A Recurrent Neural Network

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Sharif Saleki¹ (sharif.saleki.gr@dartmouth.edu), Patrick Cavanagh^{2,3}, Peter Tse¹; ¹Dartmouth College, ²Glendon College, Toronto, ON, Canada, ³Centre for Visual Research, York university, Toronto, ON, Canada

Attention: Bottom-up

53.435 Is Singleton Detection Really Less Effortful than Feature Search?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Sangji Lee¹ (lee73769598@tamu.edu), Andrew Clement¹, Brian Anderson¹; ¹Texas A&M University

53.436 Serial search suppresses attentional capture by a singleton, but not attentional orienting by a spatial cue.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Hae Chan Jeong¹ (hczang71@naver.com), Suk Won Han¹; ¹Chungnam National University

53.437 How we learn to ignore singleton distractors: Suppressing saliency signals or specific features?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Isaac Savelson¹ (savelson.1@osu.edu), Andrew B. Leber¹; ¹The Ohio State University

53.438 A New Technique for Measuring the Saliency of Distractors

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Brad T. Stilwell¹ (stilwell@binghamton.edu), Howard Egeth², Nicholas Gaspelin¹; ¹State University of New York (SUNY) at Binghamton, ²Johns Hopkins University

53.439 Task relevance changes the impact of salient items on attention

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Greta Manini^{1,2} (gremanini@go.ugr.es), Elisa Martín-Arévalo¹, Fabiano Botta¹, Juan Lupiáñez¹, Nancy Carlisle²; ¹University of Granada, ²Lehigh University

53.440 Contextual cues reduce attentional capture

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Jeff Moher¹ (jmoher@gmail.com), Andrew Leber²; ¹Connecticut College, ²The Ohio State University

53.441 Tracking exogenous attentional capture in an urgent covert perceptual choice task

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Emily E Oor¹ (oor220@wfu.edu), Anthony W Sali¹; ¹Wake Forest University

Eye Movements: Complex tasks

53.442 The influence of eye movements during perceptual judgements

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Avi Aizenman¹ (avigael_aizenman@berkeley.edu), Alexander Goettker¹, Karl R. Gegenfurtner¹; ¹Psychology Department, Justus-Liebig-University, Giessen

53.443 Linguistic processes intervene much later than visuo-motor processes during an eye fixation: Evidence from Fixation-Related Potentials during reading.

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Régis Mancini^{1,2} (regis.mancini@univ-amu.fr), Laure Spieser², Eric Castet¹, Boris Burle², Françoise Vitu¹;

¹Laboratoire de Psychologie Cognitive (LPC), ²Laboratoire de Neurosciences Cognitives (LNC)

53.444 The effects of monocular and binocular retinal image minification during natural tasks

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Iona R. McLean¹ (ionamclean@berkeley.edu), Ian M. Erkelens², Esther F. Sherbak¹, Loganne T. Mikkelsen¹, Robin Sharma², Emily A. Cooper¹; ¹University of California, Berkeley, ²Meta Reality Labs

53.445 How Task Instructions Influence Your Gaze in Daily Life

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Andrea Ghiani¹ (a.ghiani@vu.nl), David Mann¹, Eli Brenner¹; ¹Vrije Universiteit Amsterdam

53.446 Where are my students looking at? Using Gaze Synchronicity to Facilitate Online Learning

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Marian Sauter¹, Tobias Wagner¹, Teresa Hirzle², Enrico Rukzio¹, Anke Huckauf¹; ¹Ulm University, ²University of Copenhagen

53.447 Oculomotor "laziness" constrains fixation selection in real-world tasks

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Charlie S. Burlingham^{1,2} (csb455@nyu.edu), Naveen Sendhilnathan¹, T. Scott Murdison³, Michael J. Proulx¹;

¹Reality Labs Research, Meta Platforms Inc., ²New York University, ³Reality Labs, Meta Platforms Inc.

53.448 Ancestral visuo-motor computations in the midbrain underly readers' oculomotor behavior across spaced and unspaced languages

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Françoise Vitu¹ (francoise.vitu-thibault@univ-amu.fr), Hossein Adeli², Gregory J. Zelinsky²; ¹Laboratoire de Psychologie Cognitive, CNRS, Aix-Marseille Université, ²Stony Brook University

53.449 Eye and hand movements when playing a dynamic computer game (Pong)

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Anna Schroeger¹ (annaschroeger@gmail.com), Alexander Goettker¹, Doris Braun¹, Karl Gegenfurtner¹; ¹Justus Liebig University Giessen

53.450 Processing load in pitch and rhythm notation reflects the discriminatory eye responses

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Hyun Ji Kim¹ (hyunjikim21@korea.ac.kr), Cahi-Youn Kim¹; ¹School of Psychology, Korea University

53.451 Supervising is not the same as driving: the influence of the interaction between driving modality and time-on-driving on stationary gaze entropy during long, monotonous drive

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Leandro Luigi Di Stasi^{1,2} (distasi@ugr.es), Marcelo A. C. Fernandes^{2,3}, Francesco Angioi², Christophe Prat⁴, Jaka Sodnik⁵, Carolina Diaz-Piedra^{2,6}; ¹Joint Centre University of Granada - Spanish Army Training and Doctrine Command, Spain, ²Mind, Brain, and Behavior Research Center, University of Granada, Granada, Spain, ³Department of Computer Engineering and Automation, UFRN, Natal, RN, Brazil, ⁴Commissariat à l'énergie atomique et aux énergies alternatives-CEA, Grenoble, France, ⁵University of Ljubljana. Faculty of Electrical Engineering, Ljubljana, Slovenia, ⁶College of Nursing and Health Innovation, Arizona State University, Phoenix, AZ, USA

53.452 The Impact of Cognitive Differences on Processing COVID-19 Data Visualizations

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Kristine Antonyan¹ (kantonyan@ufl.edu), Do Hyong (Ryan) Koh¹, Poorya Shidfar¹, Pavlo Antonenko¹; ¹University of Florida

53.453 Gaze Behavior While Detecting Changes in Spatial Gist in a Virtual Environment

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Morgan LaFavers¹ (u1207852@utah.edu), Scott Johnson², David Evans², Emily Tighe¹, Charisse Spencer², Sarah Creem-Regehr¹, Jeanine Stefanucci¹, Brent Chamberlain²; ¹Psychology Department, University of Utah, ²Landscape Architecture and Environmental Planning Department, Utah State University

Visual Memory: Buildup, imagery, ensembles

53.454 A computational modeling framework for ensemble perception

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Jinhyeok Jeong¹ (jjh00413@gmail.com), Thomas Palmeri¹; ¹Vanderbilt University

53.455 Building up visual memories from sensory evidence

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Maria Robinson¹ (mrobinson@ucsd.edu), Isabella DeStefano², Edward Vul³, Timothy Brady⁴; ¹University of California, San Diego

53.456 Comparison of Signal to Noise in Vision and Imagery for qualitatively different kinds of stimuli

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Tiasha Saha Roy¹ (tsaharoy@umn.edu), Jesse Breedlove¹, Ghislain St-Yves¹, Kendrick Kay¹, Thomas Naselaris¹;
¹University of Minnesota

53.457 Imagery in a pair of aphantasic and non-aphantasic identical twins: Neural similarities and differences

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Deepasri Prasad^{1,2} (deepasri.prasad.gr@dartmouth.edu), Emma Megla², Wilma A. Bainbridge²; ¹Dartmouth College, ²University of Chicago

53.458 Top-down predictions of specific visual features in the brain speed up their bottom-up categorizations for perceptual decision

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Yuening Yan¹ (yuening.yan@glasgow.ac.uk), Robin A.A. Ince¹, Jiayu Zhan¹, Oliver Garrod¹, Philippe Schyns¹;
¹University of Glasgow

53.459 The behavioral performance and cortical structural properties of aphantasia

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Shuai Chang¹ (aaronchangshuai@outlook.com), Jinhui Wang¹, Ming Meng¹; ¹South China Normal University

53.460 Perceiving precarity (beyond instability) in block towers

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Aalap D. Shah¹ (aalap.shah@yale.edu), Kimberly W. Wong¹, Ilker Yildirim¹, Brian Scholl¹; ¹Yale University

53.461 Representational Momentum and Aerodynamics: Does drag force impact the representational momentum effect?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Genna Telschow¹, Mark Neider¹; ¹University of Central Florida

53.462 Are vividness judgments in mental imagery correlated with perceptual thresholds?

Tuesday, May 23, 2023, 8:30 am – 12:30 pm, Pavilion

Ian Charest¹ (i.charest@bham.ac.uk), Clémence Bertrand Pilon¹, Hugo Delhaye¹, Vincent Taschereau-Dumouchel^{1,2,3}, Frédéric Gosselin¹; ¹cerebrum, Département de Psychologie, Université de Montréal, Montréal, Canada, ²Département de Psychiatrie et d'addictologie, Université de Montréal, Montréal, Canada, ³Centre de Recherche de l'Institut Universitaire en Santé Mentale de Montréal, Montréal, Canada

Tuesday Afternoon Posters in Banyan Breezeway

Plasticity and Learning: Cortex

56.301 The neurochemistry of adult sensory eye dominance plasticity

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Ka Yee Kam¹, Dorita H. F. Chang¹; ¹Department of Psychology, The University of Hong Kong

56.302 Visual experience is necessary for selectivity of faces over language in the

fusiform

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Elizabeth Saccone¹ (esaccon2@jhu.edu), N. Apurva Ratan Murty², Judy Kim³, Akshi LNU¹, Mengyu Tian^{1,4}, Nancy Kanwisher², Marina Bedny¹; ¹Johns Hopkins University, ²Massachusetts Institute of Technology, ³Princeton University, ⁴Beijing Normal University at Zhuhai

56.303 Neural predictors of surprise in controlled visual task and naturalistic viewing contexts

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Ziwei Zhang¹ (zz112@uchicago.edu), Monica Rosenberg¹; ¹The University of Chicago

56.304 Neural representations of visual stimuli in primary visual cortex change as a function of threat and safety learning

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Lihan Cui¹ (lihancui@ufl.edu), Andreas Keil², Mingzhou Ding¹; ¹J Crayton Pruitt Family Department of Biomedical Engineering, University of Florida, ²Department of Psychology and NIMH Center for Emotion and Attention, University of Florida

56.305 The medial prefrontal cortex and dorsolateral prefrontal cortex play complementary roles in facilitating visual perceptual learning during sleep

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Takashi Yamada¹ (takashi_yamada@brown.edu), Shazain Khan¹, Peter Sage¹, Pooja Kalyan¹, Hana Berhe¹, Yu-Ang Cheng¹, Yusuke Nakashima¹, Aaron Cochrane¹, Takeo Watanabe¹, Yuka Sasaki¹; ¹Brown University

56.306 From repetition-based to reactivation-induced perceptual learning: engagement of higher-order attentional brain regions

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Taly Kondat¹ (talykondat@mail.tau.ac.il), Niv Tik¹, haggai Sharon², Ido Tavor¹, Nitzan Censor¹; ¹Sagol School of Neuroscience, Tel-Aviv University, ²Tel Aviv Sourasky Medical Center

56.308 Direction discrimination training recovers fine orientation perception in V1-damage fields

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Matthew Cavanaugh¹ (matthew_cavanaugh@urmc.rochester.edu), Tina Liu², Elisha Merriam², Duje Tadin¹, Krystel Huxlin¹; ¹University of Rochester, ²Laboratory of Brain and Cognition, National Institute of Mental Health

56.309 Bypassing V1: Orientation selectivity in hMT+ of cortically-blinded patients

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Tina T. Liu¹ (tong.liu2@nih.gov), Helena P. Bachmann¹, Matthew R. Cavanaugh^{2,3}, Berkeley K. Fahrenthold^{2,3}, Michael D. Melnick^{2,3,4}, Shruti Japee¹, Krystel R. Huxlin^{2,3,4}, Elisha P. Merriam¹; ¹Laboratory of Brain and Cognition, National Institute of Mental Health, NIH, Bethesda, MD, USA, ²Flaum Eye Institute, University of Rochester Medical Center, Rochester, NY, USA, ³Center for Visual Science, University of Rochester, Rochester, NY, USA, ⁴Brain and Cognitive Sciences, University of Rochester, Rochester, NY, USA

56.310 The Timecourse of Distorted Representations in the Primary Visual Cortex

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

O. Batuhan Erkat^{1,2}, Julien Corbo², John P. McClure Jr.^{1,2}, Pierre-Olivier Polack²; ¹Rutgers University - Newark, Behavioral and Neural Sciences Graduate Program, ²Rutgers University - Newark, Center for Molecular and Behavioral Neuroscience

56.311 Short-term monocular deprivation in adult humans alters pulvino-cortical functional connectivity measured with resting-state fMRI at ultra-high field

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Miriam Acquafredda^{1,2} (miriam.acquafredda@unifi.it), Laura Biagi^{3,4}, Michela Tosetti^{3,4}, Maria Concetta Morrone¹, Paola Binda¹; ¹University of Pisa, Italy, ²University of Florence, Italy, ³IRCCS Stella Maris, Calambrone, Pisa, Italy, ⁴IMAGO Center, Pisa, Italy

Plasticity and Learning: Sensorimotor

56.312 Using tools as cues for dual adaptation to opposing visuomotor rotations in virtual reality

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Andrew King¹ (kinga21@yorku.ca), Laura Mikula², Shanaathanan Modchalingam³, Bernard Marius t'Hart⁴, Denise Henriques⁵; ¹York University, ²Centre for Vision Research

56.313 Modulations of sensorimotor network through visual motor training in people with Parkinson's disease (PwPD)

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Joseph FX DeSouza^{1,2,7} (desouza@yorku.ca), J Royze Simon^{1,7}, Ashkan Karimi^{2,7}, Amita Agrawal^{2,7}, Rebecca E Barnstaple^{1,3,7}, Judith Bek⁶, Rachel Bar⁴, Karolina Bearss¹, Katyoun Ghanai^{5,7}; ¹Dept of Psychology, York University, ²Interdisciplinary Graduate Studies, York University, ³Chigamik Community Health Centre, Midland, ⁴Canada's National Ballet School, Toronto, ⁵Dept of Music, York University, ⁶Faculty of Kinesiology and Physical Education, University of Toronto, ⁷Centre for Vision Research, York University, Canada

56.314 Specific motor learning induced by space-variant visual feedback distortion of the hand position

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Giulia Sedda¹ (giulia.sedda@unica.it), Giulia Olla¹, Danilo Pani¹; ¹Department of Electrical and Electronic Engineering (DIEE), University of Cagliari, Cagliari, Italy.

56.315 The effect of visual statistical learning on proactive motor control is modulated by transcranial random noise stimulation over frontoparietal cortex.

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Giulia Ellena¹ (giulia.ellena@iit.it), Federica Contò¹, Michele Tosi^{1,2}, Lorella Battelli^{1,3}; ¹Center for Neuroscience and Cognitive Systems@UniTn, Istituto Italiano di Tecnologia, Rovereto, Italy, ²Center for Mind/Brain Sciences, University of Trento, Rovereto, Italy, ³Department of Neurology, Beth Israel Hospital, Harvard Medical School, Boston, USA

56.316 The domain-specific contribution of working memory to sensorimotor learning

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sean O'Bryan¹ (sean_obryan@brown.edu), Joshua Liddy^{1,2}, Joo-Hyun Song¹; ¹Brown University, ²University of Massachusetts - Amherst

56.317 Effects of different kinds of feedback on unconscious action learning and unconscious perception learning

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Jie Gao¹ (jiegao@m.scnu.edu.cn), Zhiqing Deng¹, Jiantong Ye¹, Yichong Zhang¹, Juan Chen^{1,2}; ¹Center for the Study of Applied Psychology, Guangdong Key Laboratory of Mental Health and Cognitive Science, and the School of Psychology, South China Normal University, Guangzhou, Guangdong Province, 510631, China, ²Key Laboratory of Brain, Cognition and Education Sciences (South China Normal University), Ministry of Education

Perception & Action: Grasping

56.318 Grasping type affects Configural Encoding in Visual Working Memory

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Shinhae Ahn¹ (a.shinhae@wustl.edu), Hyung-Bum Park², Richard A. Abrams¹; ¹Washington University in St. Louis, ²University of California, Riverside

56.319 Looking at the Ebbinghaus illusion: differences in fixations fail to explain a classic perception-action dissociation

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Robert Whitwell¹, Mel Goodale¹, Mehul Garach², Irene Sperandio³; ¹The University of Western Ontario, London, Canada, ²Windsor Regional Hospital, Windsor, Canada, ³University of Trento, Rovereto, Italy

56.320 Multisensory grasping relies on individual finger positions and their joint relationship

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Ivan Camponogara¹ (ic39@nyu.edu), Robert Volcic¹; ¹New York University Abu Dhabi

56.321 Visual selection of multi-digit contact surfaces for objects of varying mass

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Kira Isabel Dehn¹ (kira.i.dehn@psychol.uni-giessen.de), Guido Maiello¹, Fabrizio Lepori^{1,2}, Frieder Hartmann¹, Constantin A. Rothkopf³, Roland W. Fleming^{1,4}; ¹Justus Liebig University Giessen, ²University of Genoa, ³Technical University of Darmstadt, ⁴Centre for Mind, Brain and Behaviour (CMBB), University of Marburg and Justus Liebig University Giessen

56.322 The simultaneous tilt illusion reveals separate yet interacting visual systems for perception and action

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Hasan A. Hasan¹ (hasanh822@gmail.com), James T. Enns¹, Robert L. Whitwell²; ¹University of British Columbia, Vancouver, Canada, ²Western University, London, Canada

56.323 Visually occluded grasp modulates orientation representation in human early visual cortex

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Thanaphop Threethipthikoon¹ (238003r@gs.kochi-tech.ac.jp), Zhen Li², Hiroaki Shigemasa¹; ¹Kochi University of Technology, ²University of Hong Kong

56.324 Shape Influences Perceived Ease of Grasping

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

McKenzie Gunter¹ (w10149389@usm.edu), Tyler Overstreet¹, Catherine Dowell¹, Alen Hajnal¹; ¹University of Southern Mississippi

56.325 Abstract representations of grasping action parameters in the dorsal stream

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Naama Zur¹ (nrz9@georgetown.edu), Yuqi Liu^{1,2}, Sriparna Sen¹, Nanak Nihal Khalsa¹, Jody Culham^{3,4}, Ella Striem-Amit¹; ¹Georgetown University, ²Institute of Neuroscience, Key Laboratory of Primate Neurobiology, CAS Center for Excellence in Brain Sciences and Intelligence Technology, Chinese Academy of Sciences, Shanghai, China; ³Department of Psychology, University of Western Ontario, London, Ontario, N6A 5C2, Canada; ⁴Brain and Mind at Western, Western Interdisciplinary Research Building, University of Western Ontario, London, Ontario, N6A 3K7, Canada

56.326 How humans visually select how and where to grasp objects with articulated hands

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Frieder Hartmann¹ (frieder.hartmann@psychol.uni-giessen.de), Guido Maiello¹, Fabrizio Lepori^{1,2}, Kira Dehn¹, Constantin A. Rothkopf³, Rolan W. Fleming; ¹Justus Liebig University Gießen, ²Department of Informatics, Bioengineering, Robotics, and Systems Engineering, University of Genoa, ³Institute of Psychology & Centre for Cognitive Science, Technical University of Darmstadt, ⁴4. Centre for Mind, Brain and Behaviour (CMBB), University of Marburg and Justus Liebig University Giessen

3D: Spatial layout and VR/AR

56.327 Psychophysical scale of optical distortions of multifocal spectacle lenses

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yannick Sauer¹ (yannick.sauer@uni-tuebingen.de), David-Elias Künstle¹, Felix Wichmann¹, Siegfried Wahl^{1,2}; ¹University of Tübingen, ²Carl Zeiss Vision International GmbH, Aalen, Germany

56.328 People Separate Allocentric and Egocentric Cues to Judge Orientation of their Surroundings and the Self

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Jong-Jin Kim¹ (johnk84@yorku.ca), Pierre-Pascal Forster², Meaghan McManus², Katja Fiehler², Laurence Harris^{1,3}; ¹Center for Vision Research, York University, ²Justus Liebig University Giessen, ³Department of Psychology, York University

56.329 Perceived absolute distances in the intermediate distance range (>2 m) affected by binocular vision and target duration

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yiya Chen¹, Zijiang He², Teng Leng Ooi¹; ¹The Ohio State University, ²University of Louisville

56.330 Tracking Perceptual Depth with Eye Vergence Movements in Real World, Augmented Reality, and Virtual Reality Environments

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Mohammed Safayet Arefin¹ (arefin@acm.org), J. Edward Swan II², Russell Cohen Hoffing¹, Steven M. Thurman¹; ¹DEVCOM US Army Research Laboratory, ²Mississippi State University, USA

56.331 A method to align real and virtual objects for mixed reality investigations of visually guide grasping

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Fabrizio Lepori^{1,2} (fabrizio.lep96@gmail.com), Guido Maiello¹, Kira Dehn¹, Frieder Hartmann¹, Manuela Chessa², Constantin A. Rothkopf³, Roland W. Fleming^{1,4}; ¹Department of Experimental Psychology, Justus Liebig University Giessen, ²Department of Informatics, Bioengineering, Robotics, and Systems Engineering, University of Genoa, ³Institute of Psychology & Centre for Cognitive Science, Technical University of Darmstadt, ⁴Centre for Mind, Brain and Behaviour (CMBB), University of Marburg and Justus Liebig University Giessen

56.332 Angular Expansion in Perceived Elevation Without a Visual Ground Plane

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Prince Tardeh¹, Crystal Xu¹, Andrew Cheng¹, Frank Durgin¹; ¹Swarthmore College

56.333 Vection, presence, and cybersickness in a virtual reality driving simulation

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Benjamin Hughes¹ (bephughe@ucsc.edu), Hassan Naeem¹, Nicolas Davidenko¹; ¹University of California, Santa Cruz

56.334 Perceived location of a static target in the dark affected by self-motion in the natural environment

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Lizhu Yan¹ (lizhu.yan@louisville.edu), Lingling Bai¹, Teng Leng Ooi², Zijiang He¹; ¹University of Louisville, ²The Ohio State University

56.336 Pupil responses to near and far stimuli at varying fixation depths in virtual reality

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Marnix Naber¹ (marnixnaber@gmail.com), Brendan Portengen^{1,2}, Christoph Strauch¹; ¹Experimental Psychology, Helmholtz Institute, Utrecht University, The Netherlands, ²Ophthalmology, University Medical Center Utrecht, The Netherlands

56.337 No evidence for a 'close advantage' effect in virtual reality

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Rebecca Hornsey¹ (rlhornsey@outlook.com), Laurie Wilcox¹, Erez Freud¹; ¹York University

56.338 Affordances and expectations about depth play a role in real objects' access to visual awareness

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Uri Korisky^{1,2} (uri.korisky@gmail.com), Niv Cohen¹, Mor Farjun¹, Noa Kaner¹, Yael Solar¹, Liad Mudrik¹; ¹Tel Aviv University, ²Hebrew University of Jerusalem

56.339 Correct rendering blur

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Khatar Alshammari¹; ¹-

56.340 Exploration of laser-based augmented reality device in the investigation of melanopsin's role in human vision, via direct stimulation of the blind spot.

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Amir Vala Tavakoli¹ (amirvala@caltech.edu), Teppei Imamura², Ryo Ogawa², Masanori Iwasaki², Takanobu Omata², Jesus del Rio Salgado¹, Iyla Rossi¹, Shao-Min Hung³, Daw-An Wu¹, Shinsuke Shimojo¹; ¹Division of Biology and Biological Engineering, California Institute of Technology, ²Sony Group Corporation, ³Faculty of Science and Engineering, Waseda University

Eye Movements: Scenes, VR, 3D

56.341 GAZE - a benchmark sample of free gaze behaviour towards complex scenes

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Marcel Linka¹ (marcellinka54@gmail.com), Harun Karimpur¹, Benjamin de Haas¹; ¹Department of Experimental Psychology, Justus-Liebig-University Giessen

56.342 The influence of semantics and scene congruence on visual change detection during saccades

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Brian Odegaard¹ (bodegaard@ufl.edu), Isaac Lee², Alan L.F. Lee², Addison Sans¹, Leo Ng², Ryan Faulkner¹, Andrew Haun³, Dana Chesney⁴, David Rosenthal⁵, Francis Fallon⁴; ¹University of Florida, ²Lingnan University, ³University of Wisconsin, ⁴St. John's University, ⁵City University of New York

56.343 The Role of Prediction During Continuous Visual Tracking in 3D Environments

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Aleksandra Marijan¹ (amarija@iu.edu), Clara Mestre¹, T Rowan Candy¹, Kathryn Bonnen¹; ¹Indiana University

56.344 Cues for predictive eye movements in naturalistic scenes

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Alexander Goettker¹ (alexander.goettker@psychol.uni-giessen.de), Karl Gegenfurtner¹; ¹Justus Liebig University Giessen

56.345 Vergence performance to natural images of different sizes

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Clara Mestre¹ (cmestre@iu.edu), Alyssa Powell¹, Tanner Grace¹, T. Rowan Candy¹; ¹Indiana University

56.346 Dynamics of gaze and body while viewing omnidirectional stimuli

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Erwan David¹ (david@psych.uni-frankfurt.de), Melissa Vo¹; ¹Scene Grammar Lab, Goethe University Frankfurt

56.347 Reconstructing pupillary dynamics during free-viewing of movies: the roles of pupil light and orienting responses

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yuqing Cai¹ (y.cai2@uu.nl), Christoph Strauch¹, Marnix Naber¹; ¹Experimental Psychology, Helmholtz Institute, Faculty of Social Sciences, Utrecht University, The Netherlands

56.348 Looking for potential action: Differences in exploration behavior of static and (potentially) dynamic scenes

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Nicolas Roth^{1,2} (roth@tu-berlin.de), Jasper McLaughlin¹, Klaus Obermayer^{1,2}, Martin Rolfs^{1,3}; ¹Cluster of Excellence Science of Intelligence, ²Technische Universität Berlin, ³Humboldt-Universität zu Berlin

56.349 Free Moving Gaze-related Electroencephalography in Mobile Virtual Environments

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Ying Choon Wu¹ (yingchoon@gmail.com), Chiyuan Chang¹, Weichen Liu¹, Cory Stevenson², Russell Cohen Hoffing³, Steven Thurman³, Tzyy-Ping Jung¹; ¹UC San Diego, ²National Yang Ming Chiao Tung University, ³Army Research Laboratory

Motion: Optic flow

56.350 Recasting visual areas specialized for processing optic flow in the human brain

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Li Li^{1,2} (ll114@nyu.edu), Xuechun Shen^{3,2}, Shuguang Kuai^{3,2}; ¹Faculty of Arts and Science, New York University Shanghai, Shanghai, China, ²NYU-ECNU Institute of Brain and Cognitive Science at New York University Shanghai, Shanghai, China, ³School of Psychology and Cognitive Science, East China Normal University, Shanghai, China

56.351 Retinal flow controls gait during natural locomotion

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Daniel Panfili¹ (dan.panfili@utexas.edu), Nathaniel Powell², Youjin Oh³, Mary Hayhoe⁴; ¹University of Texas at Austin

56.352 Retinal optic flow during real-world behavior

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Jonathan Matthis¹ (jonmatthis@gmail.com), Trenton Wirth¹; ¹Northeastern University

56.353 Speed estimation for spatiotemporally bound and unbound motion stimuli

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Giuliana Martinatti Giorjani^{1,2} (giuliana.mg17@gmail.com), Rosanne L. Rademaker¹; ¹Ernst Strüngmann Institute for Neuroscience in Cooperation with the Max Planck Society, Frankfurt in Main, Germany, ²Department of Cognitive Neuroscience, Vrije Universiteit Amsterdam, The Netherlands

56.354 Temporal stability of human heading perception

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Oliver Layton¹ (oliver.layton@colby.edu), Eli Decker¹, Mufaddal Ali¹; ¹Colby College

56.355 The Effects of Environmental Structure and Texture on Perceived Travel Distance

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Ambika Bansal¹ (ambikatarabansal@gmail.com), Meaghan McManus², Katja Fiehler², Laurence R. Harris¹; ¹Centre for Vision Research, York University, ²Justus-Liebig University Giessen

56.356 Travel distance estimation from biological motion and optic flow

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Anna-Gesina Hülmeier¹ (huelemeier@wwu.de), Markus Lappe²; ¹University of Münster

56.357 Natural scene statistics of figure-ground motion in MT receptive fields

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Clara Tenia Wang¹ (cl.wang@berkeley.edu), Minqi Wang¹, Xin Huang², Emily A. Cooper¹; ¹University of California, Berkeley, Berkeley, CA, ²University of Wisconsin-Madison, Madison, WI

56.358 Comparing Visual and Omniscient Models of Collective Crowd Motion

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

James Falandays¹ (james_falandays@brown.edu), William Warren¹; ¹Brown University

Perceptual Organization: Contour integration, common fate

56.359 A moving watercolor illusion

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Austin Kral¹, James Brown¹; ¹University of Georgia

56.360 Contour Integration Using Boundary and Region Information

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Doreen Hii¹ (doreen.hii@uci.edu), Zygmunt Pizlo¹; ¹University of California, Irvine

56.361 Detecting Correlated Target Motion in Moving and Static Dot Arrays

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Bernice Rogowitz¹ (bernice.e.rogowitz@gmail.com), Christophe Hurter²; ¹Visual Perspectives Research, ²ENAC, French Civil Aviation University, University of Toulouse France

56.362 Feature-selective mechanisms that underlie the perception of causality

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Sven Ohl¹ (sven.ohl@hu-berlin.de), Martin Rolfs²; ¹Humboldt-Universität zu Berlin

56.363 Gestalt grouping vs. ensemble perception when following a crowd

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

William Warren¹, Meghan Willcoxon¹; ¹Brown University, Providence, RI USA

56.365 High Spatial Frequency Stimuli Amplify Visual Integration Deficits in Schizophrenia and Bipolar Disorder

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Banyan Breezeway

Yonatan Abrham¹ (yabrham@ur.rochester.edu), Megan Serody², Bart Krekelberg³, Judy Thompson¹, Steven Silverstein¹, Michael Cole³, Deanna Barch⁴, Laura Crespo⁵, Brian Keane¹; ¹University of Rochester, ²Stony Brook University, ³Rutgers University, Newark, ⁴Washington University in St. Louis, ⁵University of Chicago

Tuesday Afternoon Posters in Pavilion

Object Recognition: Categories

56.401 Visuo-semantic clashes: What happens when objects do not look like they should?

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Inga María Ólafsdóttir^{1,3} (ingao@ru.is), Marelle Maeekalle^{2,3}, Heida Maria Sigurdardottir^{2,3}; ¹Reykjavik University, ²University of Iceland, ³Icelandic Vision Lab

56.402 Control of BOLD fMRI Responses Via Stimuli Generated with Voxel-Weighted Neural Network Activation Maximization

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Matthew Shinkle¹ (mshinkle1040@gmail.com), Mark Lescroart¹; ¹University of Nevada, Reno

56.403 Assessing the feasibility of high stimulus presentation rates for contrasting conditions in functional MRI studies

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Johannes Roth¹, Yoichi Miyawaki², Martin N. Hebart¹; ¹Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, ²University of Electro-Communications, Tokyo

56.404 Category trumps shape as an organizational principle of object space in the human occipitotemporal cortex

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Elahe Yargholi¹ (elahe.yargholi@kuleuven.be), Hans Op de Beeck¹; ¹KU Leuven

56.405 Comparing Human Object Learning with Deep Neural Networks

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Yinuo Peng¹, Zhen Zhu¹, Derek Hoiem¹, Ranxiao Frances Wang¹; ¹University of Illinois at Urbana-Champaign

56.406 Optimizing Naturalistic Object Categorization with Diagnostic Low-Level Visual

Information

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Yongzhen Xie¹ (yongzhen.xie@mail.utoronto.ca), Michael Mack¹; ¹Department of Psychology, University of Toronto

56.407 Temporal dynamics of stereoscopic object classification

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Zhen Li¹ (li_zhen22@qq.com), Dorita H. F. Chang¹; ¹The University of Hong Kong

56.408 The tortoise and the hare: Fast and slow learners in an object categorization task

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

James Tanaka¹ (jtanaka@uvic.ca), Kyla Basbaum¹, Amy vanWell¹, Anna Lawrance¹, Cole Tamburri¹; ¹University of Victoria, Canada

56.409 Visual adaptation to non-face animate objects elicits temporally robust high-level aftereffects

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Antonia Reindl¹ (antonia.reindl@hu-berlin.de), Gerhard Scholtz¹, Torsten Schubert²; ¹Humboldt-Universität zu Berlin, ²Martin-Luther-Universität Halle-Wittenberg

56.410 A common neural code for representing imagined and inferred tastes

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Jason Avery¹ (jason.avery@nih.gov), Madeline Carrington², Alex Martin³; ¹National Institute of Mental Health

56.411 Probing feature spaces of object categories with a drawing task

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Henning Tiedemann¹, Yaniv Morgenstern², Filipp Schmidt¹, Roland W Fleming¹; ¹University of Giessen, ²University of Leuven

56.412 The Sequential categorization identification paradigm: A New paradigm for combined inferences

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Aylin Ak¹ (aylin.ak-1@ou.edu), Michael Wenger¹, James Townsend², Sarah Newbolds¹; ¹University of Oklahoma, ²Indiana University

Object Recognition: Neural mechanisms

56.413 Spatial-frequency channels for object recognition by neural networks are twice as wide as those of humans

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Ajay Subramanian¹ (as15003@nyu.edu), Elena Sizikova¹, Najib J. Majaj¹, Denis G. Pellli¹; ¹New York University

56.414 Detectability of optogenetic stimulation in inferior temporal cortex in non-

human primates depends on the plausibility of a corresponding visual event in the external world

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Rosa Lafer-Sousa¹ (rosa.lafer-sousa@nih.gov), Elia Shahbazi¹, Karen Wang², Tyler Swedan¹, Arash Afraz¹;

¹National Institute of Mental Health, ²University of Southern California

56.415 Neurons in macaque V4 prefer natural images to scrambled textures

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Justin D. Lieber¹ (justinlieber@nyu.edu), Timothy D. Oleskiw^{1,2}, Eero P. Simoncelli^{1,2}, J. Anthony Movshon¹; ¹New York University, ²Flatiron Institute

56.416 Probing the role of bypass connections in core object recognition by chemogenetic suppression of macaque V4 neurons

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Kohitij Kar¹ (kohitij@mit.edu); ¹Department of Biology, Centre for Vision Research, York University, Toronto, Canada

56.417 Simultaneous recordings from posterior and anterior body-responsive regions in the macaque Superior Temporal Sulcus.

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Anna Bognar^{1,2} (anna.bognar@kuleuven.be), Albert Mukovskiy³, Ghazal Ghamkhari Nejad^{1,2}, Nick Taubert³, Michael Stettler³, Rajani Raman^{1,2}, Martin Giese³, Rufin Vogels^{1,2}; ¹Department of Neuroscience, KU Leuven, Leuven, Belgium, ²Leuven Brain Institute, KU Leuven, Leuven, Belgium, ³HIH&CIN, Department of Cognitive Neurology, University Clinic Tübingen, Tübingen, Germany

56.418 Adaptation to numerosity changes monotonic responses of early visual cortex

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Liangyou Zhang¹ (l.zhang6@uu.nl), Evi Hendriks¹, Yizhen Wang², Serge O. Dumoulin^{1,3,4,5}, Ben M. Harvey¹; ¹Experimental Psychology, Helmholtz Institute, Utrecht University, ²School of Psychology, South China Normal University, ³Spinoza Centre for Neuroimaging, ⁴Computational Cognitive Neuroscience and Neuroimaging, Netherlands Institute for Neuroscience, ⁵Experimental and Applied Psychology, Vrije University Amsterdam

56.419 Color and Shape Contingency Representations in Rhesus Macaques

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Spencer Loggia¹ (spencer.loggia@nih.gov), Stuart Duffield¹, Kurt Braunlich^{1,2}, James Cavanaugh¹, Bevil Conway¹; ¹National Eye Institute, ²National Institute of Mental Health

56.420 Recurrent processing in the visual cortex during object recognition

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Timothée Maniquet^{1,2,3} (tim.maniquet@kuleuven.be), Andrea Costantino^{1,2}, Hans Op de Beeck^{1,2}; ¹KU Leuven, ²Leuven Brain Institute, ³Research Foundation – Flanders

56.421 The effects of visual backward masking on visual spatiotemporal dynamics

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Siying Xie¹ (siying.xie@outlook.com), Daniel Kaiser^{2,3}, Johannes Singer¹, Radoslaw Cichy^{1,4,5,6}; ¹Freie Universität Berlin, ²Justus-Liebig-Universität Gießen, ³Center for Mind, Brain and Behavior (CMBB), Philipps-Universität Marburg and Justus-Liebig-Universität Gießen, ⁴Berlin School of Mind and Brain, Humboldt-Universität zu Berlin, ⁵Einstein Center for Neurosciences Berlin, Charité-Universitätsmedizin Berlin, ⁶Bernstein Center for Computational Neuroscience Berlin, Humboldt-Universität zu Berlin

56.422 Changes in the speed of visual processing between foveola and perifovea: a combined behavioral and EEG investigation

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Martina Poletti¹ (martina_poletti@urmc.rochester.edu), Samantha K. Jenks¹, Alessandro Benedetto¹; ¹University of Rochester

56.423 Lesioning category-selective units in silico yields functionally specialized deficits

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Jacob S. Prince¹ (jacob.samuel.prince@gmail.com), George A. Alvarez¹, Talia Konkle¹; ¹Harvard University

56.424 Evaluating the Central-Peripheral Dichotomy in human visual cortex using anatomical and retinotopic data in Human Connectome Project

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Li Zhaoping¹ (li.zhaoping@tuebingen.mpg.de); ¹University of Tuebingen, Max Planck Institute for Biological Cybernetics

56.425 Brain-optimized models reveal increase in few-shot concept learning accuracy across human visual cortex

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Ghislain St-Yves¹, Kendrick Kay¹, Thomas Naselaris¹; ¹University of Minnesota

Face Perception: Wholes, parts, configurations, and features

56.426 Faces Are Not Processed Holistically in Ensemble Judgments

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Isabel Gauthier¹ (isabel.gauthier@vanderbilt.edu), Oakyoon Cha²; ¹Vanderbilt University, ²Sungshin Women's University, Seoul, South Korea

56.427 Two faces of holistic face processing: Facilitation and interference underlying holistic processing paradigms

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Haiyang Jin¹ (haiyang.jin@nyu.edu), William G. Hayward², Olivia S. Cheung¹; ¹Department of Psychology, New York University Abu Dhabi, ²Department of Applied Psychology, Lingnan University

56.428 A novel framework to study configural and holistic processing

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Yuxuan Zeng¹ (zeng.774@osu.edu), Ren E Hentz¹, David E Osher¹; ¹The Ohio State University

56.429 Mouth-specific distortions: Evidence from prosopometamorphopsia for independent representations of individual facial features

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Alexis Kidder^{1,2}, Brad Duchaine¹; ¹Dartmouth College, ²NIMH

56.430 The Overestimation Effect in Gaze Perception Reduces with Distance

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Gernot Horstmann¹ (gernot.horstmann@uni-bielefeld.de), Linda Linke¹; ¹Bielefeld University

56.431 Does perceptual integration efficiency predict face identification skills?

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Laurianne Côté¹, Pierre-Louis Audette¹, Caroline Blais¹, Francis Gingras¹, Justin Duncan¹, Daniel Fiset¹;

¹Université du Québec en Outaouais

56.432 Face recognition ability is correlated with strength of cortical tuning to high-level identity features in natural faces

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Barbora Jurigova¹, Susan Hao¹, Alex Huth², Brad Duchaine³, Ivan Alvarez¹, Sonia Bishop^{1,4}; ¹University of California Berkeley, ²The University of Texas at Austin, ³Dartmouth College, ⁴Trinity College Dublin

56.433 The impact of eyeglasses on face identity perception

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Hillary Nguyen¹, Marvin Chun¹, Yaoda Xu¹; ¹Yale University

56.434 Colour information biases facial age estimation and reduces inter-observer variability

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Jean hsieh¹ (jeanyjhsieh@gmail.com), Paul Boyce, Erin Goggard, Colin Clifford; ¹The University of New South Wales

56.435 Illusory Conjunction in Faces

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Herrick Fung¹ (herrickfung@gmail.com), Janet H. Hsiao¹, William G. Hayward²; ¹Department of Psychology, The University of Hong Kong, ²Department of Applied Psychology, Lingnan University

56.436 Configural selectivity for faces in IT cortex is experience-dependent

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Akshay V Jagadeesh¹, Margaret S Livingstone¹; ¹Harvard Medical School

56.438 Face information used to classify identity depends on emotional expression and vice-versa

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Emily Martin¹ (emart459@fiu.edu), Jason Hays¹, Fabian Soto¹; ¹Florida International University

56.439 Does the face say it all? Examining face and body integration in whole-person perception.

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Katelyn Forner¹ (katelynforner13@gmail.com), Isabella Schopper¹, Amy vanWell¹, James Tanaka¹; ¹University of Victoria

Face Perception: Development and disorders

56.440 Can face recognition/recollection in developmental prosopagnosia really be improved? Evidence from a repetition-lag training paradigm

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Leah Kirsch^{1,2}, Regan Fry^{1,2}, Mieke Verfaellie^{3,4}, Nicole Anderson⁵, Joseph DeGutis^{1,2}; ¹Department of Psychiatry, Harvard Medical School, Boston MA, ²Boston Attention and Learning Lab, Boston VA Healthcare System, Boston, MA, ³Memory Disorders Research Center, Boston VA Healthcare Systems, Boston MA, ⁴Department of Psychiatry, Boston University School of Medicine, Boston MA, ⁵Departments of Psychology and Psychiatry, University of Toronto, ON, Canada

56.441 Accounting for speed-accuracy trade-offs in developmental prosopagnosia

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Judith Lowes¹ (judith.lowes@stir.ac.uk), Peter J.B. Hancock¹, Anna K. Bobak¹; ¹University of Stirling, Stirling, United Kingdom

56.442 Fine-grained face race processing in prosopagnosia

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Pauline Schaller¹ (pauline.schaller@unifr.ch), Peter de Lissa¹, Justin Duncan², Anne-Raphaëlle Richoz¹, Roberto Caldara¹; ¹University of Fribourg, ²Université du Québec en Outaouais

56.443 Putting Memory back into Face Recognition: Aspects of Face Recollection Contribute to Deficits in Developmental Prosopagnosia

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Tanvi Palsamudram^{1,2} (tanvi.palsamudram@gmail.com), Bar Yosef, Alison Campbell^{1,2}, Regan Fry^{1,2}, Mieke Verfaellie^{3,4}, Nicole Anderson⁵, Joseph DeGutis^{1,2}; ¹Department of Psychiatry, Harvard Medical School, Boston MA, ²Boston Attention and Learning Laboratory, Boston VA Healthcare Systems, Boston MA, ³Memory Disorders Research Center, Boston VA Healthcare Systems, Boston MA, ⁴Department of Psychiatry, Boston University School of Medicine, Boston MA, ⁵Departments of Psychology and Psychiatry, University of Toronto, ON, Canada

56.444 Quantifying dynamic facial expression recognition thresholds in prosopagnosia

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Fanny Poncet¹, Lisa Stacchi¹, Anne-Raphaëlle Richoz¹, Roberto Caldara¹; ¹University of Fribourg

56.445 Prosopagnosia elicits atypical fixation patterns during dynamic facial expression recognition

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Lisa Stacchi¹, Anne-Raphaëlle Richoz¹, Nayla Sokhn¹, Roberto Caldara¹; ¹University of Fribourg

56.446 Semantic encoding improves face recognition in prosopagnosia

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Yuval Navon¹, Linoy Schwartz², Yiyuan Zhang³, Brad Duchaine³, Galit Yovel¹; ¹Tel Aviv University, ²Reichman University, ³Dartmouth College

56.447 Exploring facial expression recognition in Parkinson's

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Maille Gracey¹ (mfg056@student.bham.ac.uk), Connor Keating¹, Sophie Sowden¹, Jennifer Cook¹; ¹University of Birmingham

56.448 Pose dependent face recognition in autism spectrum disorder

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Todd Kamensek^{1,4} (todd.kamensek@ubc.ca), Anastasia Stolzenberg^{1,2}, Grace Iarocci³, Ipek Oruc^{1,4}; ¹Neuroscience, University of British Columbia, ²Department of Psychology, University of British Columbia, ³Department of Psychology, Simon Fraser University, ⁴Department of Ophthalmology and Visual Sciences, University of British Columbia

56.449 Leveraging computational and animal models of vision to probe atypical emotion recognition in autism

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Hamidreza Ramezanpour¹ (hamidram@yorku.ca), Kohitij Kar¹; ¹Department of Biology, Centre for Vision Research, York University, Toronto, Canada

56.450 Facial Emotion Recognition in People with Differing Levels of Eating Disorder Symptoms

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Ilya Nudnou¹ (ilya.nudnou@ndsu.edu), Katherine Duggan¹, Lauren Schaefer², Benjamin Balas¹; ¹North Dakota State University, ²Sanford Center for Biobehavioral Research

56.451 Anxious youth and adults share threat-biased interpretations of visual and linguistic ambiguity

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Delaney McDonagh¹, Michelle Rozenman¹, Timothy Sweeny¹, Emily Jones¹, Anni Subar¹; ¹University of Denver

Face Perception: Social cognition

56.452 A NETWORK OF REGIONS IN THE HUMAN BRAIN INVOLVED IN PROCESSING FAMILIARITY

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Kira Noad¹ (kira.noad@york.ac.uk), David Watson¹, Timothy Andrews¹; ¹University of York

56.453 Electrophysiological evidence that own-race faces are recognized more automatically

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Chloé Galinier¹ (galc13@uqo.ca), Justin Duncan¹, Caroline Blais¹, Daniel Fiset¹; ¹Université du Québec en Outaouais

56.454 Both Purely Visual and Simulation-based Models Uniquely Explain Human Social Interaction Judgements

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Manasi Malik¹ (mmalik16@jhu.edu), Leyla Isik¹; ¹Johns Hopkins University

56.455 General architectural and learning constraints produce visual features sensitive to facing dyads

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Daniel Janini¹ (janinidp@gmail.com), Talia Konkle; ¹Harvard University

56.456 Does face recognition correlate with narcissism? A replication.

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Gabriella Romero-Ayala¹, Zane Kingsbury², Marin Foss³, Kellie Schmidt⁴, Sherryse Corrow⁵; ¹Bethel University

56.457 Religious labels and food preferences, but not country of origin, support opposing aftereffects on the basis of religion

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Maheen Shakil¹ (shakilm@mcmaster.ca), M.D. Rutherford¹; ¹McMaster University

56.458 Inferential tracking reveals context is more informative than faces in judgments of trustworthiness.

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Yifan Fang¹ (yfang2024@berkeley.edu), Jefferson Ortega¹, Necdet Gürkan², Jordan W. Suchow², David Whitney¹; ¹University of California, Berkeley, ²Stevens Institute of Technology

56.459 Lateralization of dynamic social interaction perception

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Hannah Small¹ (hsmall2@jhu.edu), Leyla Isik¹; ¹Johns Hopkins University

56.460 New task - new results? How the area of direct gaze is influenced by the method of measurement

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Linda Linke¹, Gernot Horstmann¹; ¹Bielefeld University

56.461 How we can use the eyes to understand human interaction

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Wee Kiat Lau¹ (wee.lau@uni-ulm.de), Marian Sauter², Lisa Valentina Eberhardt³, Anke Huckauf⁴; ¹Ulm University

56.462 Viewing images with closed eyes diminishes implied social presence

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Oliver Jacobs¹ (ojacobs@psych.ubc.ca), Farid Pazhoohi¹, Alan Kingstone¹; ¹University of British Columbia

56.463 Effect of Sclera Size on Social Judgements: A Potential Support for the Cooperative Eye Hypothesis

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Mathias Boyer-Brosseau¹ (mathias.boyer-brosseau@uqtr.ca), Simon Rigoulot², Sebastien Hetu³; ¹Université du Québec de Trois-Rivières (UQTR), ²Université de Montreal (UdeM)

56.464 Positive Valence Acquisition of Non-social Stimuli Associated with Low Cognitive Effort

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Lily R. Reck¹ (lilyrosereck@gwu.edu), Rebeka C. Almasi¹, Jini Tae², Yoonhyoung Lee³, Myeong-Ho Sohn¹; ¹George Washington University, ²Gwangju Institute of Science and Technology, ³Yeungnam University

56.465 Dyad arrangement affects perceived emotional intensity

Tuesday, May 23, 2023, 2:45 – 6:45 pm, Pavilion

Katie L.H. Gray¹ (k.l.h.gray@reading.ac.uk), Zoe St Louis-King¹, Richard Cook², Mahsa Barzy¹; ¹University of Reading, ²Birkbeck, University of London

Wednesday Morning Posters in Banyan Breezeway

Temporal Processing: Neural mechanisms and models

63.301 Perceptual sensitivity depends on the contrast of preceding and following stimuli across hundreds of milliseconds

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Michael Epstein¹ (mlepstein88@gmail.com), Rachel Denison¹; ¹Boston University

63.302 Aperiodic and Periodic EEG predict performance in a double-flash fusion task

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Michele Deodato¹ (md5050@nyu.edu), David Melcher¹; ¹New York University Abu Dhabi

63.303 Relationship between steady-state responses in simultaneously acquired LFP and EEG

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Dixit Sharma¹ (ds1663@rutgers.edu), Bart Krekelberg¹; ¹Rutgers University - Newark

63.304 Gain Changes in Response to Full Field Flicker

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Bart Krekelberg¹ (bart@vision.rutgers.edu), Alexander Schielke²; ¹Rutgers University - Newark

63.305 Event probabilities tend to scale inversely with neural measures of prediction error, but positively with measures of time perception

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Blake Saurels¹ (b.saurels@uq.edu.au), Derek Arnold¹; ¹Perception Lab, The University of Queensland

63.306 Cortical quantity representations of visual numerosity and timing overlap increasingly but remain distinct

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Evi Hendriks¹ (e.h.hendriks@uu.nl), Jacob M. Paul², Martijn van Ackooij¹, Nathan van der Stoep¹, Ben M. Harvey¹; ¹Utrecht University, ²University of Melbourne

63.307 An experimental and theoretical study of the critical fusion frequency as a function of stimulus duty ratio

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kotaro Oikawa¹, Ruggero Micheletto¹; ¹Yokohama City University

63.308 Event-related Potentials Associated with Inhibitory Processes of Forward Masking

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Hulusi Kafaligonul^{1,2} (hulusi@bilkent.edu.tr), Afife Turker^{1,2}; ¹Interdisciplinary Neuroscience Program, Aysel Sabuncu Brain Research Center, Bilkent University, ²National Magnetic Resonance Research Center, Bilkent University

63.309 Seeing fast and slow: systematic state and trait variations in visual temporal acuity

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

David Melcher¹ (david.melcher@nyu.edu), Gaia Lapomarda¹, Michele Deodato¹; ¹New York University Abu Dhabi

63.310 Evidence for a second rod pathway in the human retina with a cone-like spectral sensitivity

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Christopher Tyler¹ (cwt@ski.org), Russell Hamer², Michael Liang¹, Zhangziyi Zhou¹, Lora Likova¹; ¹Smith-Kettlewell Eye Research Institute, ²Florida Atlantic University

63.311 Is temporal crowding mediated by averaging across time?

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ilanit Hochmitz¹ (ilanit57@gmail.com), Yaffa Yeshurun; ¹University of Haifa

63.312 Temporal sensitivity in the central fovea

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ruitao Lin^{1,2} (rlin18@ur.rochester.edu), Alessandro Benedetto^{1,2}, Janis Intoy^{1,2}, Benjamin Moon^{2,3}, Ashley M. Clark^{1,2}, Samantha K. Jenks^{1,2}, Sanjana Kapisthalam^{1,2}, Martina Poletti^{1,2}, Michele Rucci^{1,2}; ¹Department of Brain and Cognitive Sciences, University of Rochester, NY, USA, ²Center for Visual Science, University of Rochester, NY, USA, ³The Institute of Optics, University of Rochester, NY, USA

63.313 Segmenting the magnocellular regions in the human lateral and medial geniculate nuclei using quantitative MRI

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Irem Yildirim¹ (irem.yldrm8@gmail.com), Khan Hekmatyar¹, Keith A Schneider¹; ¹University of Delaware

Object Recognition: Features and parts

63.314 Temporal-spatial configuration of musical notation: Distinguishing visual and conceptual influences on expert and novice performance

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Niels J. Verosky¹ (niels.verosky@nyu.edu), Olivia S. Cheung; ¹New York University Abu Dhabi

63.315 Perception of retinal images: Can artificial intelligence help us discover new diagnostic features?

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Lei Yuan¹ (cyuan26@student.ubc.ca), Gulcenur Ozturan¹, Ipek Oruc¹; ¹University of British Columbia

63.316 Revisiting the animacy, size, and curvature organization of human visual cortex

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Laura M. Stoinski¹, Oliver Contier^{1,2}, Talia Konkle³, Martin N. Hebart⁴; ¹MPI Human Cognitive & Brain Sciences, Leipzig, Germany, ²Max Planck School of Cognition, Max Planck Institute for Human Cognitive & Brain Sciences, Leipzig, Germany, ³Department of Psychology & Center for Brain Science, Harvard University, Cambridge, Massachusetts, ⁴Department of Medicine, Justus Liebig University, Giessen, Germany

63.317 Different tasks performed on same objects result in functionally distinct activation of LOTC and IPS

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Arnab Biswas¹ (arnab@nevada.unr.edu), Mark D. Lescroart; ¹University of Nevada, Reno

63.318 Functional contributions of the dorsal pathway to shape perception: Evidence from intracranial recording

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Max Kramer¹ (mkramer@mkramerpsych.com), Vladislav Ayzenberg¹, Zhengjia Wang², Christina Patterson³, Marlene Behrmann^{1,4}; ¹Department of Psychology, Carnegie Mellon University, ²Department of Neurosurgery, Perelman School of Medicine, University of Pennsylvania, ³Department of Pediatrics, University of Pittsburgh, ⁴Department of Ophthalmology, University of Pittsburgh

63.319 The impact of culture on the processing of spatial frequencies during the recognition of homogenous objects

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Alexandre Cousineau¹ (alex.cousineau@outlook.com), Francis Gingras^{1,2}, Daniel Fiset¹, Caroline Blais¹; ¹Université du Québec en Outaouais, ²Université du Québec à Montréal

63.320 The Signal and the Noise: Optimizing the Reverse Correlation Technique via Noise Selection

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Gennadiy Gurariy¹ (ggurariy@mcw.edu), Ethan Duwell¹, Adam Greenberg¹; ¹Medical College of Wisconsin

63.321 The spatiotemporal neural dynamics of Braille letter representations in individuals with congenital blindness

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Marleen Haupt¹, Monika Graumann¹, Santani Teng², Radoslaw Cichy¹; ¹Freie Universität Berlin, Germany, ²Smith-Kettlewell Eye Research Institute, San Francisco, USA

63.322 Uncovering the hidden computations of deep neural networks by tracing the trajectory manifold from images to feature activations

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Christopher Hamblin¹ (chrishamblin@fas.harvard.edu), Talia Konkle¹, George Alvarez¹; ¹Harvard University

63.323 Unsupervised feature selection methods for modeling human similarity judgments with deep neural networks

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nhut Truong¹ (leminhnhut.truong@unitn.it), Anna Bavaresco¹, Uri Hasson¹; ¹Center for Mind/Brain Sciences (CIMEC), University of Trento

63.324 Which fragments support object recognition best?

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Elsa Scialom¹ (elsa.scialom@epfl.ch), Udo A. Ernst², David Rotermund², Michael H. Herzog¹; ¹Ecole Polytechnique Fédérale de Lausanne (EPFL), ²University of Bremen, Bremen, Germany

63.325 Delayed foveal noise affects performance in a vernier offset discrimination task

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Martina Morea¹ (martina.morea@epfl.ch), Roberta Cessa², Michael Herzog¹, Marco Bertamini³; ¹Laboratory of Psychophysics, Brain Mind Institute, École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland., ²Department of General Psychology, University of Padova, Padova, Italy., ³Department of Psychology, University of Liverpool, Liverpool, UK.

63.326 Effect of Radial Frequency and Amplitude on Target Detection

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Samuel Smithers¹ (s.smithers@northeastern.edu), Wei Hau Lew², Yulong Shao¹, Daniel Coates², Peter Bex¹; ¹Northeastern University, ²University of Houston

Visual Memory: Capacity, encoding, retrieval

63.327 Image memorability modulates image recognition, but not image localization in space and time

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nathan Trinkl¹, Jeremy M. Wolfe^{1,2}; ¹Brigham and Women's Hospital, ²Harvard Medical School

63.328 Modestly related memories for when and where an object was seen in a Massive Memory paradigm.

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jeremy Wolfe^{1,2} (jwolfe@bwh.harvard.edu), Claire Wang³, Nathan Trinkl¹, Wanyi Lyu⁴; ¹Brigham and Womens Hospital, ²Harvard Medical School, ³Phillips Academy, Andover, MA, ⁴York U, Toronto

63.329 No Icon in "Iconic" Memory: Short Retention Intervals Benefit Simple Visual Features But Not Complex Objects

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Mary Catington¹ (mfc120@msstate.edu), Michael Pratte¹; ¹Mississippi State University

63.330 Confidence in reality monitoring judgments.

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Saurabh Ranjan¹ (saurabh.ranjan@ufl.edu), Jessica Baltes¹, Adyssa Roh¹, Brian Odegaard¹; ¹University of Florida

63.331 Global Mean Position Perception of Multiple Spatially-Separated Ensembles

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Yang Wang¹ (wangy0802@hotmail.com), Edward Vul¹, Timothy Brady¹; ¹University of California, San Diego

63.332 People remember face pareidolia more than human face images during naturalistic encoding

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Olga Kreichman^{1,2} (oplaksin88@gmail.com), Limor Brook^{1,2}, Susan Wardle³, Sharon Gilaie-Dotan^{1,2,4}; ¹School of Optometry and Vision Science, Bar Ilan University, Israel, ²The Gonda Multidisciplinary Brain Research Center, Bar Ilan University, Israel, ³National Institute of Mental Health, ⁴UCL Institute of Cognitive Neuroscience, London, UK

63.333 Symbol superiority: Why \$ is better remembered than 'dollar'

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Brady Roberts¹, Colin MacLeod¹, Myra Fernandes¹; ¹University of Waterloo

63.334 Color priming facilitates cued location recall in a visuospatial short-term memory partial report paradigm

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Tanner Lumpkin¹ (tlump9771@ung.edu), Courtney Nutt², Patsy Folds³, Ralph Hale⁴; ¹University of North Georgia

63.335 Exploring the impact of a constructive encoding task on visual recognition memory

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

William P. McCarthy¹, Judith E. Fan²; ¹UC San Diego, Department of Cognitive Science, ²UC San Diego, Department of Psychology

63.336 Mixed Graph Designs Do Not Improve Visual Memory

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Madeline F. Awad¹ (madelineawad2025@u.northwestern.edu), Kylie Lin¹, Steven L. Franconeri¹; ¹Northwestern University

63.337 Quantifying the Temporal Dynamics of Memorability Across the Creation of Art

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Trent M. Davis¹ (trentdavis@uchicago.edu), Wilma A. Bainbridge¹; ¹University of Chicago

63.338 Visual similarity structure a priori predicts memory errors for novel high-dimensional face stimuli

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Timothy Brady¹ (timothy.brady@gmail.com), Maria Robinson¹; ¹University of California, San Diego

63.339 When is it helpful to forget? Comparing the effects of forgetting on visual and auditory perceptual decisions

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Malinda McPherson¹ (mjmcpherson@ucsd.edu), Timothy Brady; ¹University of California, San Diego

Spatial Vision: Texture

63.340 The effects of symmetry on visual ensemble perception

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jaeeun LEE¹ (jaeeun@pusan.ac.kr), Sung Jun Joo¹; ¹Pusan National University

63.341 Texture difference cues in figure-ground separation

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jonathan Victor¹ (jdvicto@med.cornell.edu), Mary Conte¹; ¹Weill Cornell Medical College

63.342 Second-order boundaries segment more easily when density-defined rather than feature-defined

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Christopher DiMattina¹ (cdimattina@fgcu.edu); ¹Department of Psychology, Florida Gulf Coast University

63.343 Contextual interactions between orientation- and contrast-modulated textures in the tilt induction

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Elena Gheorghiu¹ (elena.gheorghiu@stir.ac.uk), Rui Tang², Frederick A.A. Kingdom²; ¹University of Stirling, United Kingdom, ²McGill University, Canada

63.344 Surround induction with orientation modulated textures

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Amenabhwon Natasha Thomas¹, Elena Gheorghiu², Selin Eriz¹, Frederick Kingdom¹; ¹McGill University, ²University of Stirling

63.345 When Summary Statistics Clash: Competing summary statistics modulate the attentional prioritization of ensemble representations

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kristina Knox¹ (kristina.knox@mail.utoronto.ca), Jay Pratt¹, Jonathan S. Cant²; ¹University of Toronto, ²University of Toronto Scarborough

63.346 The cost of forming statistical summary representations across multiple spatial scales

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Sandarsh Pandey¹ (sandarshpand@umass.edu), Kyle Cave¹; ¹UMass Amherst

Visual Search: Attention

63.347 Super-additive associative learning benefit for repeated task-relevant and task-irrelevant elements in visual search

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Emma M. Siritzky¹ (esiritzky@gwu.edu), Samoni Nag¹, Chloe Callahan-Flintoft², Stephen R. Mitroff¹, Dwight J. Kravitz¹; ¹The George Washington University, Department of Psychological and Brain Sciences, ²U.S. Army Research Laboratory

63.348 Activation of multiple attentional templates in conjunction search

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Ziyi Wang¹ (ziyi.wang5@durham.ac.uk), Martin Eimer², Anna Grubert¹; ¹Durham University, ²Birkbeck, University of London

63.349 Does visual distinctiveness from an unexpected feature dimension facilitate search?

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Zoe (Jing) Xu¹ (jingxu9@illinois.edu), Alejandro Lleras¹, John E. Hummel¹, Simona Buetti¹; ¹University of Illinois, Urbana Champaign

63.350 Using regularity-based temporal predictions to shift our attentional template across time during multiple-target dynamic visual search

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Gwenllian C. Williams^{1,2,3} (gwenllian.williams@psy.ox.ac.uk), Sage E. P. Boettcher^{1,2,3}, Anna C. Nobre^{1,2,3}; ¹Department of Experimental Psychology, University of Oxford, ²Wellcome Centre for Integrative Neuroimaging, University of Oxford, ³Oxford Centre for Human Brain Activity, University of Oxford

63.351 Shifting target representations away from distractor features is task-adaptive

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Xinger Yu¹ (xeyu@ucdavis.edu), Raisa Rahim¹, Joy Geng^{1,2}; ¹Center for Mind and Brain, University of California, Davis, ²Department of Psychology, University of California, Davis

63.352 Contextual cueing effects of various targets in the same context

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jeunghwan Choi¹ (abcdef0518@naver.com), Sang Chul Chong^{1,2}; ¹Graduate Program in Cognitive Science, Yonsei University, ²Department of Psychology, Yonsei University

63.353 Enhancement and suppression of category exemplars

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Y. Isabella Lim¹ (isabella.lim@mail.utoronto.ca), Jay Pratt¹; ¹University of Toronto

63.354 Joint contributions of instruction and preview on visual search strategy

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Tianyu Zhang¹ (zhang.11476@osu.edu), Andrew B. Leber¹; ¹The Ohio State University

63.355 The limitations of categorical distractor suppression

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Jessica N. Goetz¹ (jngoetz@knights.ucf.edu), Mark B. Neider¹; ¹University of Central Florida

63.356 To Feedback or Not to Feedback? That is the Question When Attempting to Improve the Low Prevalence Effect Using Probes Trials

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Andrew Rodriguez¹ (rodri818@msu.edu), Derrek T. Montalvo¹, Mark W. Becker¹; ¹Michigan State University

63.357 Attentional differences predict ensemble coding and are moderated by probe effects

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Laramie Starling¹ (lrs@usf.edu), Chad Dubé¹; ¹University of South Florida

63.358 Statistical Learning and Attentional Priority

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Aidai Golan¹, Dominique Lamy²; ¹Tel Aviv University

Visual Search: Strategies, efficiencies

63.359 Not so rapid: Dominant-looking faces elicit deliberate but not efficient search

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Shujuan Ye¹ (yeshj5@mail2.sysu.edu.cn), Ke Wu¹, Xiayun Lin¹, Xiaowei Ding¹; ¹Sun Yat-sen University

63.360 Search efficiency scales with semantic relatedness in audiovisual contexts

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Kira Wegner-Clemens¹, George Malcolm², Sarah Shomstein¹; ¹George Washington University, ²University of East Anglia

63.361 Visual detection of threat and rapid decisions to "shoot": Can mindfulness-based meditation practices improve signal detection accuracy and reduce implicit racial bias?

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

David Peterzell¹ (davidpeterzell@mac.com); ¹Fielding Graduate University, ²National University (JFK)

63.362 Modeling Observer Search Termination in a Subsequent Search Misses (SSM) Experimental Framework: The Role of Experience.

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nelson Roque¹ (nelson.roque@ucf.edu), Stephen Adamo²; ¹University of Central Florida

63.363 The effects of blur adaptation on visual search performance

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Idris Shareef¹ (ishareef@unr.edu), Nasif Zaman², Alireza Tavakkoli², Fang Jiang¹; ¹Department of Psychology, University of Nevada, Reno, USA, ²Department of Computer Science and Engineering, University of Nevada, Reno, USA

63.364 The FORAGEKID Game: Using Hybrid Foraging to Study Executive Functions and Search Strategies During Development

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Beatriz Gil-Gómez de Liaño¹ (bgil.gomezdelianno@uam.es), Jeremy M Wolfe²; ¹Universidad Autónoma de Madrid, ²BWH-Harvard Medical School

63.365 Close, but not a T: Feedback, not similarity search, reduces the low-prevalence effect

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Greer Gillies¹ (greer.gillies@mail.utoronto.ca), Benjamin Wolfe², Anna Kosovicheva; ¹University of Toronto, ²University of Toronto, Mississauga

63.366 Emotion recognition, not attentional capture, drives visual search asymmetries to emotional expressions

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Sjoerd Stuit¹ (s.m.stuit@uu.nl), Alejandra Pardo Sanchez², David Terburg¹; ¹Utrecht University, ²University College Utrecht

63.367 Multidimensional templates: Explicit goals unlock implicit spatial statistical learning

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Nancy Carlisle¹ (nancy.carlisle@gmail.com), Ziyao Zhang²; ¹Lehigh University, ²UT Austin

63.368 Individual differences in patch leaving strategy in visual foraging tasks

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Walden Li¹ (li.6942@osu.edu), Mackenzie Siesel¹, Andrew Leber¹; ¹The Ohio State University

63.369 Why are some individuals better in using negative templates to suppress distractors? Exploration of the inter-individual differences in proactive control efficiency

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Matthieu Chidharom¹ (maca21@lehigh.edu), Nancy Carlisle¹; ¹Lehigh University

63.370 Category Variability Provides Challenges to Learning and Search Performance

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Banyan Breezeway

Paeon Luby¹ (paeon.luby@richmond.edu), Arryn Robbins¹; ¹University of Richmond

Wednesday Morning Posters in Pavilion

Perception and Action: Perception of Human Actions and Bodies

63.401 The role of action-related properties in shaping the object space in the biological and artificial brain

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Davide Cortinovic¹ (davide.cortinovic@unitn.it), Hans Op de Beeck², Stefania Bracci¹; ¹Center for Mind/Brain Sciences - CIMEC, University of Trento, Italy, ²Laboratory of Neuro- and Psychophysiology, Department of Neurosciences, KU Leuven, Belgium

63.402 Individual variability in sensorimotor mu suppression to observation of human actions

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Alison Harris¹ (aharris@cmc.edu), Perri McElvain¹, Alvin Villarosa¹, Chandlyr Denaro¹, Catherine L. Reed¹; ¹Claremont McKenna College

63.403 Force representations support social perception of moving shapes

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Yiling Yun¹ (yiling.yun@g.ucla.edu), Shuhao Fu¹, Yi-Chia Chen¹, Hongjing Lu¹; ¹University of California, Los Angeles

63.404 Shared and individual thresholds for social signal detection

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Rekha S. Varrier¹ (rekha.s.varrier@dartmouth.edu), Alison H. Sasaki¹, Tory G. Benson¹, Ashna J. Kumar¹, Jordan M. Selesnick¹, Emily S. Finn¹; ¹Dartmouth College

63.405 Semantic representations of human actions across vision and language

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Diana C Dima¹ (ddima@uwo.ca), Jody Culham¹, Yalda Mohsenzadeh¹; ¹Western University

63.406 Virtual reality protocol for decomposing complex behaviour into tractable subcomponents.

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Levi Kumle^{1,2}, Anna C. Nobre^{1,2}, Melissa Vo³, Dejan Draschkow^{1,2}; ¹Department of Experimental Psychology, University of Oxford, Oxford, UK, ²Oxford Centre for Human Brain Activity, Wellcome Centre for Integrative Neuroimaging, University of Oxford, UK, ³Department of Psychology, Scene Grammar Lab, Goethe University Frankfurt, Germany

63.407 Neurodynamical model for IT responses during the anorthoscopic perception of bodies

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Martin A. Giese¹ (martin.giese@uni-tuebingen.de), Anna Bognar², Rufin Vogels²; ¹Hertie Institute / CIN, University

Clinic Tuebingen, ²Lab. voor Neuro- en Psychofysiologie, KU Leuven, Belgium

63.408 The roles of kinematics and posture in yoga expertise identification

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Sophia Baia^{1,2} (srbaia@asu.edu), Akila Kadambi², Hongjing Lu²; ¹Arizona State University, ²University of California, Los Angeles

63.409 The visual dorsal stream processes tool-use actions regardless of body part even in people born without hands

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Florencia Martinez Addiego¹ (fam53@georgetown.edu), Yuqi Liu^{1,2}, Caroline O'Brien¹, Sriparna Sen¹, Nanak Nihal Khalsa¹, Maximilian Riesenhuber¹, Jody Culham^{3,4}, Ella Striem-Amit¹; ¹Georgetown University Medical Center, ²Institute of Neuroscience, Key Laboratory of Primate Neurobiology, CAS Center for Excellence in Brain Sciences and Intelligence Technology, Chinese Academy of Sciences, ³Department of Psychology, University of Western Ontario, ⁴Brain and Mind at Western, Western Interdisciplinary Research Building, University of Western Ontario

63.410 Prior Knowledge Biases the Perception of Body Postures

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Qiu Han¹ (hanqiuishere@gmail.com), Marco Gandolfo¹, Marius Peelen¹; ¹Donders Institute for Brain, Cognition and Behaviour, Radboud University, 6525 HR, Nijmegen, The Netherlands

63.412 Identification and relative depth estimation in natural images of single human body parts

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Jiaqi Liu¹, Daniel Kersten¹; ¹University of Minnesota Twin Cities

63.413 Identification of ambiguous human body parts depends on pair-wise structural knowledge in natural images

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Ziwei Liu¹ (liu00964@umn.edu), Daniel Kersten¹; ¹University of Minnesota

63.414 fROI-level computational models enable broad-scale experimental testing and expose key divergences between models and brains

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Elizabeth Mieczkowski¹ (emiecz@mit.edu), Alex Abate¹, Willian De Faria¹, Kirsten Lydic¹, James DiCarlo^{1,2,3}, Nancy Kanwisher^{1,2,3}, N. Apurva Ratan Murty^{1,2,3}; ¹Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, ²Center for Brains, Minds and Machines, Massachusetts Institute of Technology, ³McGovern Institute for Brain Research, Massachusetts Institute of Technology

63.415 Percepts of biological motion disappear in slow-moving displays: Evidence for domain-specific agent perception

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Merve Erdogan¹ (merve.erdogan@yale.edu), Nikolaus Troje², Brian Scholl¹; ¹Yale University, ²York University

63.416 Human see, human do? Viewing tool pictures evokes action-specific activity in

visual hand-selective occipitotemporal cortex

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Annie Warman¹ (a.warman@uea.ac.uk), Diana Tonin¹, Fraser Smith¹, Ethan Knights¹, Stéphanie Rossit¹;

¹University of East Anglia, UK

63.417 Computing a unique neural fingerprint of bodily expressions and actions

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Vojtech Smekal¹ (v.smekal@maastrichtuniversity.nl), Marta Poyo Solanas¹, Beatrice de Gelder¹; ¹Maastricht University

Eye Movements: Fixation

63.418 Occluding one eye during fixation increases wandering of both eyes

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Scott N.J. Watamaniuk^{1,2} (scott.watamaniuk@wright.edu), Stephen J. Heinen², Devashish Singh², Arvind Chandna²; ¹Wright State University, ²The Smith-Kettlewell Eye Research Institute

63.419 Fixational instability impedes visually-guided behaviors in patients with amblyopia

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Sunwoo Kwon¹ (kwsunwoo@berkeley.edu), Dennis Levi^{1,2}; ¹Herbert Wertheim School of Optometry & Vision Science, UC Berkeley, ²Helen Wills Neuroscience Institute

63.420 Systematic variation of fixational eye movements with degree of myopia.

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Michele A. Cox¹, Ashley M. Clark¹, Janis Intoy¹, Benjamin Moon¹, Ruei-Jr Wu¹, Jonathan D. Victor², Michele Rucci¹; ¹University of Rochester, ²Weill Cornell Medical College

63.421 The effect of fixational eye movements on the flicker-defined edge detection

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Seonggyu Choe¹ (sgchoe@unist.ac.kr), Chang-Yeong Han¹, Hyosun Kim², Oh-Sang Kwon¹; ¹Ulsan National Institute of Science and Technology, ²Samsung Display R & D Center

63.422 Dynamical modeling of interindividual differences in fixational drift and microsaccades

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Lisa Schwetlick¹ (lisa.schwetlick@uni-potsdam.de), Ralf Engbert¹; ¹University of Potsdam

63.423 Dilation can minimize pupil-induced fixational drift.

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Kevin Willeford¹ (kwillefo@nova.edu), Victoria Georges²; ¹NOVA Southeastern College of Optometry

63.424 Microsaccades in head-free high-acuity tasks

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Paul Jolly^{1,2} (pjolly3@ur.rochester.edu), Yuanhao H. Li^{1,2}, Michele A. Cox^{1,2}, Ashley M. Clark^{1,2}, Bin Yang^{1,2}, Ruitao Lin^{1,2}, Zhetuo Zhao^{1,2}, Michele Rucci^{1,2}; ¹Department of Brain and Cognitive Sciences, University of Rochester, NY, USA, ²Center for Vision Science, University of Rochester, NY, USA

63.425 A model comprising independent control and conjugacy explains miniature fixation eye movements

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Stephen Heinen¹ (heinen@ski.org), Arvind Chandna¹, Devashish Singh¹, Scott Watamaniuk^{1,2}; ¹Smith-Kettlewell Eye Research Institute, ²Wright State University, Department of Psychology

63.426 Different levels of awareness for spontaneous, involuntary, and voluntary microsaccades

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Jan-Nikolas Klanke^{1,2} (jan-nikolas.klanke@hu-berlin.de), Sven Ohl¹, Martin Rolfs^{1,2}; ¹Humboldt-Universität zu Berlin, ²Berlin School of Mind and Brain

63.427 Eye torsion induced by a tilted image is larger during free viewing than fixation

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Jorge Otero-Millan^{1,2} (jom@berkeley.edu), Stephanie Reeves¹; ¹University of California, Berkeley, ²Johns Hopkins University

Eye Movements: Attention, cognition, neural processes

63.428 Mr. Chips Jr. : A transformer-based computational model to study eye movements during reading

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

MiYoung Kwon¹ (miyoungkwon02@gmail.com), Alish Dipani¹; ¹Northeastern University

63.429 Maintaining eye fixations facilitates resolution of spatial cognitive conflicts

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Anika Krause^{1,2,3} (anika.krause@uni-bielefeld.de), Christian H. Poth^{2,3}; ¹Biopsychology and Cognitive Neuroscience, Department of Psychology, Bielefeld University, Germany, ²Neuro-Cognitive Psychology, Department of Psychology, Bielefeld University, Germany, ³Center for Cognitive Interaction Technology (CITEC), Bielefeld University, Germany

63.430 Eye movements as indicators of trait impulsivity and hypomania proneness in healthy adults

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Juana Ayala¹, Trisha Chakrabarty^{1,2}, Ivan Torres^{1,2}, Miriam Spering^{1,2}; ¹University of British Columbia, ²Djavad Mowafaghian Centre for Brain Health

63.431 Eye movements reveal alternative problem-solving strategies in concussed individuals during performance of the Tower of London task

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Naila Ayala¹ (nayala@uwaterloo.ca), Abdullah Zafar¹, Ewa Niechwiej-Szwedo¹; ¹University of Waterloo

63.432 Leveraging the pupillary light reflex for cognitive pupillometry: An initial characterization of the PLR in two data sets

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Russell Cohen Hoffing¹ (russell.cohenh@gmail.com), Steven Thurman¹, Joseph Coyne², Ciara Sibley², Leah Enders³, Heather Roy¹; ¹Army Research Laboratory, ²Naval Research Laboratory, ³DCS

63.433 Attention modulates V4 neural activity across and in the absence of microsaccades

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Shawn Willett^{1,2} (smw146@pitt.edu), J. Patrick Mayo^{1,2}; ¹University of Pittsburgh Department of Ophthalmology, ²Center for the Neural Basis of Cognition

63.434 Pathway selective optogenetic manipulations on the oculomotor circuits of non-human primates

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Xuefei Yu¹ (yxdhhaa@126.com), Atul Gopal¹, Okihide Hikosaka¹; ¹Laboratory of Sensorimotor Research, National Eye Institute, NIH

63.435 Functional architecture of visual responses in supplementary eye field

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Pranavan Thirunavukkarasu¹ (thirunap@yorku.ca), Steven Errington², Amirsaman Sajad², Jeffrey D. Schall¹; ¹Department of Biology, Centre for Vision Research, Vision Science to Application, York University, Toronto, ON, Canada., ²Department of Psychology, Vanderbilt Vision Research Center, Vanderbilt University, Nashville, TN, USA.

63.436 Linking brain activity during viewing and recall of movie events through gaze behavior

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Matthias Nau¹, Hannah Tarder-Stoll², Austin Greene¹, Janice Chen³, Christopher Baldassano², Juan Antonio Lossio-Ventura¹, Francisco Pereira¹, Chris Baker¹; ¹National Institute of Mental Health (NIMH), ²Department of Psychology, Columbia University, ³Department of Psychological and Brain Sciences, Johns Hopkins University

63.437 V1 neural response precedes saccadic shift of visual target to the fovea

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Tomer Bouhnik^{*1} (tomerb3@gmail.com), Ofir Korch^{*1}, Yarden Nativ¹, Roy Oz¹, Hamutal Slovin¹; ¹The Leslie and Gonda (Goldschmied) multidisciplinary Brain Res. Ctr., Bar-Ilan Univ., Israel ^{*}Equal Contribution

63.438 SSVE(PLR): Comparing target classification via pupillary light responses to standard EEG-based SSVEP

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Steven Thurman¹, Russell Cohen Hoffing¹, Weichen Liu², Chiyuan Chang², Cory Stevenson³, Tzzy-Ping Jung², Ying Wu²; ¹US DEVCOM Army Research Laboratory, ²University of California, San Diego, ³National Yang Ming Chiao

Tung University

63.439 The Costs of Paying Overt and Covert Attention Assessed with Pupillometry

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Damian Koevoet¹ (d.koevoet@uu.nl), Christoph Strauch¹, Marnix Naber¹, Stefan Van der Stigchel¹; ¹Helmholtz Institute, Experimental Psychology, Utrecht University

63.440 Lateralized EEG markers of attention preceding and following shifts in eye position

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Chong Zhao¹ (chongzhao@uchicago.edu), Edward Vogel²; ¹University of Chicago

Perceptual Organization: Symmetry, preference, ensembles

63.441 Detecting second order symmetry

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Chien-Chung Chen¹ (c3chen@ntu.edu.tw), Christopher Tyler; ¹National Taiwan University, ²Smith-Kettlewell Eye Research Institute

63.442 Relating Variability in Scalp EEG to Variability in Cortical Morphology

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Sara Chaparian¹ (sarach@yorku.ca), Jeffrey Schall¹, Peter J. Kohler¹; ¹York University, Toronto, Ontario, Canada

63.443 Multiple ambiguous neural representations may be perceived as identical to or different from each other: Can Divisive Normalization Explain Which?

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Jaelyn Peiso^{1,2} (jaepeiso@gmail.com), Steven Shevell^{1,2,3}; ¹Institute for Mind and Biology, University of Chicago, ²Psychology Department, University of Chicago, ³Department of Ophthalmology & Visual Science, University of Chicago

63.444 Task-dependent geometry of a perceptual space

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Suniyya A. Waraich¹ (suniyya.waraich@gmail.com), Mary M. Conte², Jonathan D. Victor²; ¹Weill Cornell Graduate School of Medical Sciences, NY, ²Feil Family Brain and Mind Research Institute, Weill Cornell Medical College, NY

63.445 Inductive Biases of Children and Adults in a Visual Patterning Task

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Abhishek Dedhe¹, Jodie Zheng¹, Steven Piantadosi², Jessica Cantlon¹; ¹Carnegie Mellon University, ²University of California, Berkeley

63.446 Estimating the error contributions of six component processes that determine the number of reportable centroids following a brief exposure of multicolor dot arrays

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

George Sperling¹ (sperling@uci.edu), Lingyu Gan²; ¹University of California, Irvine

63.447 ERP Evidence for the Role of Attention in the Visual Discrimination of Ensemble Summary Statistics

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Anton Lukashevich¹ (anl22@hi.is), Maxim Petrov², Igor Utochkin³; ¹University of Iceland, ²Saint-Petersburg Psychiatric Hospital named after P. P. Kashchenko, ³University of Chicago

Scene Perception: Natural image statistics

63.448 Ensemble Scene Processing is Regulated by Feature Complexity

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Vignash Tharmaratnam¹, Dirk B. Walther², Jonathan S. Cant¹; ¹University of Toronto Scarborough, ²University of Toronto

63.449 Overestimation of Variability in Ensembles of Size and Color Despite Focusing Attention on Relevant Features

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Amelia C. Warden¹ (acwarden@colostate.edu); ¹Colorado State University

63.450 Contextual coherence increases perceived numerosity independent of semantic content

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Chuyan Qu¹ (qchuyan@sas.upenn.edu), Michael F. Bonner², Elizabeth M. Brannon¹; ¹University of Pennsylvania, ²Johns Hopkins University

63.451 Toddler and preschooler attention to naturalistic scene features

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Shannon Klotz¹ (smklotz@ucdavis.edu), Taylor Hayes², John Henderson³, Lisa Oakes⁴; ¹University of California, Davis

63.452 The statistics of visual input change systematically with development

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Erin Anderson¹ (ema1@iu.edu), Evelina Dineva¹, Linda Smith²; ¹Indiana University

63.453 The time course of adaptation in modified reality: isotropic environments and orientation anisotropies

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Bruno Richard¹ (bruno.richard@rutgers.edu), Christino Barbosa¹, Patrick Shafto^{1,2}; ¹Rutgers University – Newark, Newark, NJ, ²Institute for Advance Study, Princeton, NJ

63.454 Visual perceptual learning of natural and Portilla & Simoncelli images occurs in a significantly different manner than visual perceptual learning of unnatural images

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Kazuhisa Shibata¹ (kazuhisa.shibata@riken.jp), Daiki Ogawa², Yuka Sasaki³, Takeo Watanabe³; ¹RIKEN, ²Nagoya University, ³Brown University

63.456 N300 sensitivity to statistical regularity persists for low-pass filtered scenes

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Ling Lee Chong¹, Kara D Federmeier¹, Diane M Beck¹; ¹University of Illinois, Urbana-Champaign

63.457 Eye movements during active vision are not driven by saliency, meaning, or aesthetics

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Jennifer Hart¹ (jhart2@bates.edu), Wentao Si¹, Joaquin Torres¹, Ronald Mezile¹, Benjamin Balas², Michelle Greene¹; ¹Bates College, ²North Dakota State University

63.458 Local image statistics can account for the perceived naturalness of image contrast

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Taiki Fukiage¹ (t.fukiage@gmail.com), Shin'ya Nishida^{1,2}; ¹NTT Communication Science Laboratories, Nippon Telegraph and Telephone Corporation, Japan, ²Graduate School of Informatics, Kyoto University, Japan

63.459 Viewpoint and seasonal variations in natural scene statistics

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Michelle Greene¹ (mgreene2@bates.edu), Jennifer Hart¹, Benjamin Balas²; ¹Bates College, ²North Dakota State University

63.460 Understanding the high-dimensional nature of visual cortex representations

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Raj Magesh Gauthaman¹ (rgautha1@jh.edu), Brice Ménard¹, Michael Bonner¹; ¹Johns Hopkins University

Scene Perception: Models

63.461 Perceptual estimates of the physical attributes of people in photographs

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Sarah Barrington¹ (sbarrington@berkeley.edu), Hany Farid¹; ¹University of California, Berkeley

63.462 Evaluating physical scene understanding with objects consisting of different physical attributes in humans and machines

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Hsiao-Yu Tung^{1,2} (sfish0101@gmail.com), Mingyu Ding³, Zhenfang Chen⁴, Daniel Bear², Chuang Gan^{3,4}, Joshua Tenenbaum¹, Daniel Yamins², Judith Fan⁵, Kevin Smith¹; ¹Massachusetts Institute of Technology, ²Stanford University, ³University of Hong Kong, ⁴MIT-IBM Watson AI Lab, ⁵University of California San Diego

63.463 How real can they get? Investigating neural responses to GAN generated scenes.

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Aylin Kallmayer¹ (aylin.kallmayer@gmail.com), Melissa Vo¹; ¹Goethe-University Frankfurt Germany

63.464 Benchmarking Human Mid-Level Scene Understanding

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Yoni Friedman¹, Thomas O'Connell¹, Daniel Bear², Jiajun Wu², Judy Fan^{2,3}, Josh Tenenbaum¹, Dan Yamins²; ¹MIT, ²Stanford, ³UCSD

63.465 The similarity of CNN, behavioral, and PPA feature spaces

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Pei-Ling Yang¹ (plyang2@illinois.edu), Zhenan Shao¹, Diane M. Beck¹; ¹University of Illinois

63.466 Toward A Computational Model of Directional Visual Relations

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Pachaya Sailamul¹ (pachaya_sailamul@brown.edu), Thomas Serre¹; ¹Brown University

63.467 A Transfer Account of Orientation Ensemble Averaging

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Jacob Zepp¹ (jacobzepp@usf.edu), Chad Dubé¹; ¹University of South Florida

Scene Perception: Virtual environments

63.468 Studying spatial representations of our visual experience using real-world environments

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Brenda Garcia¹, Anna Mynick¹, Caroline Robertson¹; ¹Dartmouth College

63.469 Artificial Scene Grammar Acquisition

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Maxim Spur¹ (spur@psych.uni-frankfurt.de), Melissa Vo¹; ¹Scene Grammar Lab, Goethe University

63.470 The brain predominantly represents attended semantics rather than global semantics in a naturalistic task

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Tianjiao Zhang¹ (t.zhang@berkeley.edu), Jack Gallant¹; ¹UC Berkeley

63.471 Comparing Fire: Precision of Visual Perception of Fire Intensity

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Justin W. Bonny¹ (justin.bonny@morgan.edu), James A. Milke²; ¹Morgan State University, ²University of Maryland, College Park

63.472 Memory-based predictions facilitate perceptual judgements across head-turns in naturalistic scene perception

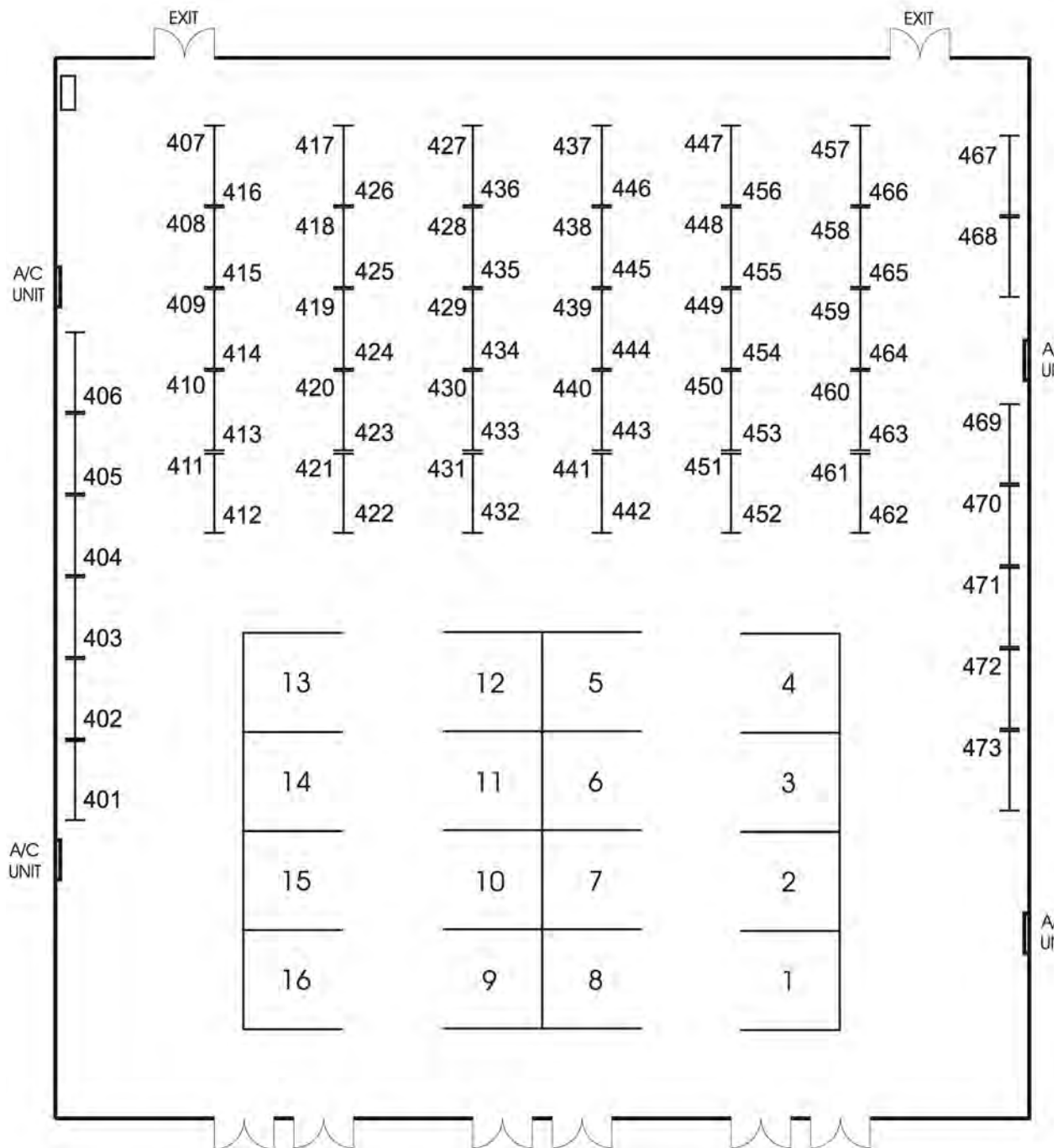
Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Anna Mynick¹ (anna.r.mynick.gr@dartmouth.edu), Thomas L Botch¹, Allie Burrows¹, Brenda D Garcia¹, Adithi Jayaraman¹, Adam Steel¹, Caroline E Robertson¹; ¹Dartmouth College

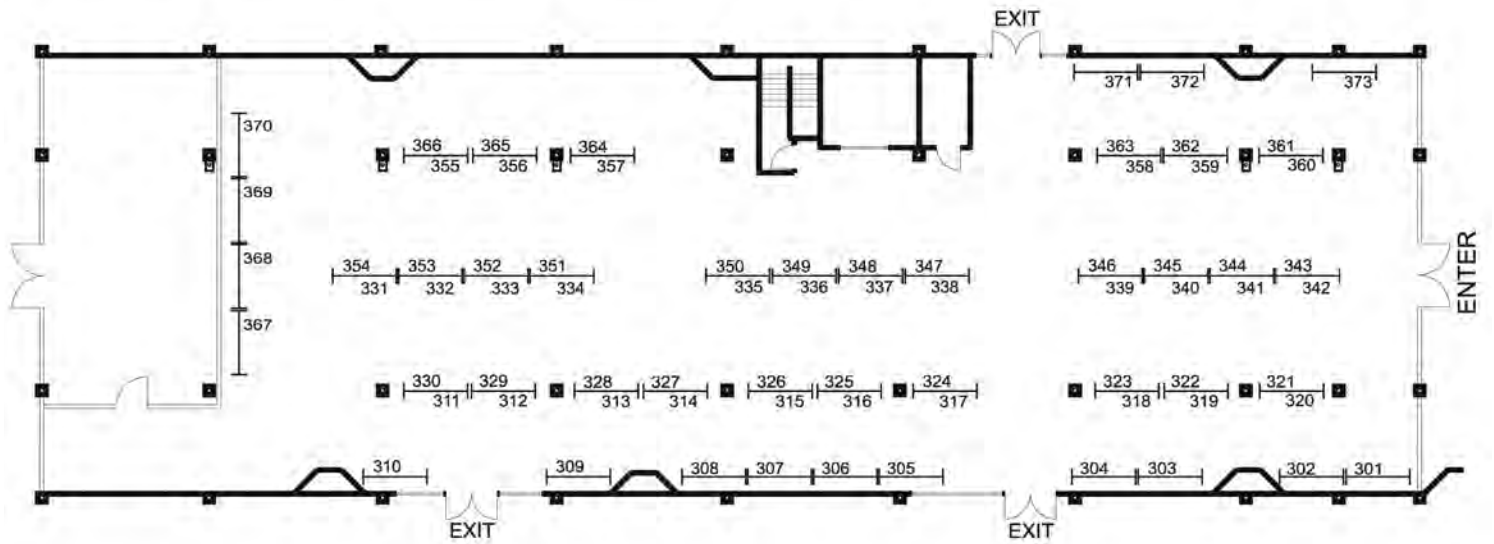
63.473 Visual clutter: The role of background texture, set size, and item organization

Wednesday, May 24, 2023, 8:30 am – 12:30 pm, Pavilion

Yelda Semizer¹ (yelda.semizer@njit.edu), Tomer Weiss¹; ¹New Jersey Institute of Technology



Pavilion



Banyan Breezeway



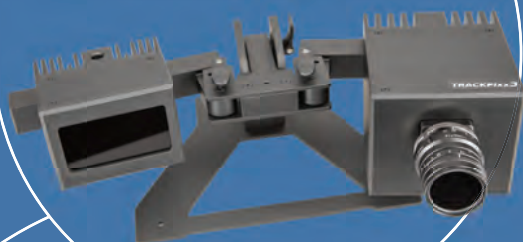
VPiXX

Vision Science Solutions

Synchronized Integrated Solution

2 kHz Eye Tracker

 TRACKPiXX3



1440 Hz Projector

 PROPiXX



120 Hz CRT Replacement

 VIEWPiXX



Video I/O Hub

 DATAPiXX3



Meet our Scientists !



Amanda Estephan, Ph.D.
scientist_estephan@vpixx.com



Sophie Kenny, Ph.D.
scientist_kenny@vpixx.com



Lindsey Fraser, Ph.D.
scientist_fraser@vpixx.com



Jonathan Tong, Ph.D.
scientist_tong@vpixx.com



vpixx.com
1-844-488-7499



VPiXX Technologies Inc.
630 Clairevue West, suite 301
Saint-Bruno, QC Canada, J3V 6B4

Over 11,000 Peer-Reviewed Publications and Counting...

EyeLink®

PORTABLE DUO



- Pack your eye-tracking lab in a carry-on bag
- Quick and easy setup using laptop or desktop displays
- Record up to 2000 Hz binocular head-stabilized and 1000 Hz head free-to-move
- Unsurpassed flexibility - multiple mounts and configurations for ALL models



Experiment Builder support for:

- BioSemi Devices
- BrainVision Recorder
- EGI Net Station 2.0
- Neuroscan
- ... and many more!

EyeLink®

1000 PLUS



- Interchangeable configuration for ECoG, EEG, fMRI, fNIRs, MEG, rTMS, PET...
- Wide range of applications including infant, patient, and NHP tracking
- Specialized MRI mounts
- Unparalleled precision and flexibility in the behavioral lab or MRI

Fast, Accurate, Reliable Eye Tracking

EyeLink is a registered trademark of SR Research Ltd.

www.sr-research.com





PREMIUM ENGINEERING & SCIENTIFIC CONSULTING

EXplore Your Future with Exponent

**Attending Vision Sciences Society Conference?
Come learn more about Exponent and connect with us in person.**

Exponent is a leading engineering and scientific consulting firm that brings together more than 50 years of experience and 90 different disciplines — including human factors (perceptual, cognitive, and developmental psychology and neuroscience) — to solve the most pressing challenges facing stakeholders today. Our vision is to engage the brightest scientists and engineers to empower clients with solutions for a safe, healthy, sustainable, and technologically complex world.



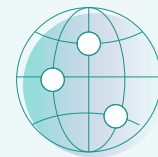
**1100+ Team
Members**



900+ Consultants



640+ Ph.D.'s



**30+ Offices
Globally**

For more information, contact:

Robert Rauschenberger, Ph.D.
Principal Scientist, Human Factors
213.304.6598 (cell)
rrauschenberger@exponent.com

To learn more about our current openings,
visit www.exponent.com/careers.

ALEXANDRIA | ATLANTA | AUSTIN | BELLEVUE | BOWIE | CHICAGO | DENVER | DETROIT | HOUSTON | IRVINE | LOS ANGELES | MAYNARD |
MENLO PARK | MIAMI | NATICK | NEW YORK | OAKLAND | PASADENA | PHILADELPHIA | PHOENIX | SACRAMENTO | SEATTLE | WARRENVILLE |
WASHINGTON D.C. | CANADA | CHINA | GERMANY | IRELAND | SINGAPORE | SWITZERLAND | UNITED KINGDOM

EXPONENT.COM | 888.656.EXPO



San Francisco, California

opam31

November 16, 2023

Join us to witness outstanding research by graduate and postdoctoral scientists at the annual Object Perception, Attention, and Memory conference.

2023 Organizers

Chenxiao Guan
Han Zhang
Karolina Krzys
Ryan O'Donnell

Visit www.opam.net for more details

2023 Exhibitors

VPiXX Technologies (Gold Sponsor)

Booths 6, 7 & 8

VPiXX Technologies welcomes the vision science community to VSS 2023.

Over the past 22 years, VPiXX has become known for our innovative hardware for vision research. The PROPiXX DLP LED video projector, supporting refresh rates up to 1440Hz, has become the standard for neuroimaging, neurophysiology, and behavioral vision research applications. The TRACKiXX3 2kHz binocular eye tracker and the DATAiXX3 I/O hub offer microsecond-precise data acquisition synchronized to stimulus presentation. Our new LabMaestro software is now making these instruments even easier to use!

Visit our booth to see demonstrations of our LabMaestro suite of psychophysics software. LabMaestro Builder is your intuitive GUI application for designing and running psychophysics experiments in your lab. LabMaestro Pack&Go is your solution for quickly running psychophysics experiments on remote subject populations. LabMaestro Simulator emulates VPiXX hardware, allowing you to develop and test experiment protocols in the absence of your physical instruments. Visit our booth to discuss your research with our Staff Scientists!

Peter April, Jean-Francois Hamelin, Sophie Kenny, and Jonathan Tong wish you well.



Exponent (Silver Sponsor)

Booth 12

Exponent is a leading scientific and engineering consulting firm.

Our multidisciplinary organization of brings together more than 90 technical disciplines to address complicated issues facing industry and government today. Among myriad other specialized services, we provide user experience and human factors support across the entire product lifecycle informed by five decades of experience in failure analysis. We are always looking for qualified PhDs, postdocs, and early-career faculty interested in technical consulting.



SR Research Ltd (Silver Sponsor)

Booth 13

SR Research produces the EyeLink family of high-speed eye trackers and has been enabling scientists to perform cutting-edge research since the early 1990s. EyeLink systems are renowned for their outstanding technical specifications, temporal precision, and superb accuracy. The EyeLink 1000 Plus has the world's lowest spatial noise and can be used in the laboratory and in EEG/MEG/MRI environments. The EyeLink Portable Duo offers the same high levels of data quality in a small, portable package. SR Research also provides sophisticated experiment delivery and analysis software, and a truly legendary support service.



Brain Vision LLC (Bronze Sponsor)

Booth 11

Brain Vision LLC is the leading team for EEG in Vision Science. We offer full integration of EEG with many leading eye-tracking and video systems we also provide flexible and robust solutions for both stationary and mobile EEG. All of our systems are available with a variety of electrode types such as saline-sponge nets, active gel, passive, and dry electrodes, which are easily expandable with bio-sensors like GSR, ECG, Respiration, and EMG. Our team is specialized in using EEG with other modalities such as fMRI, fNIRS, MEG, TMS, and tDCS/HDtDCS. If you want to know how EEG and Vision Science improve each other, please feel free to contact us:

Phone: +1.877.EEG 4 MRI

Email: info@brainvision.com



Cambridge Research Systems (Bronze Sponsor)

Booth 16

At **Cambridge Research Systems**, our reputation is founded on values of scientific rigour and integrity. For over 30 years, our unique range of Tools for Vision Science, Functional Imaging and Clinical Research has been ubiquitous in laboratories throughout the world, and cited in thousands of papers.



We design and develop innovative new tools that enable the advancement of science by combining engineering expertise with innovation, cutting edge technology, and ongoing collaboration with our valued academic partners. Our products are market leaders, our people committed and knowledgeable. Our ambition is to continue setting standards in the vision science community, of which we are proud to be a part.

We look forward to seeing you again at VSS! Please call at our booth to see our latest products for visual stimulation, eye tracking, vision assessment, and MRI; or contact enquiries@crsltd.com.

C. Light Technologies (Bronze Sponsor)

Booth 15

C. Light Technologies, is a neuro-tech and AI company whose mission is to create a scanning laser ophthalmoscope (SLO) technology and eye tracking software to objectively measure eye motion via the retina. We are on the mission to create novel technology to enhance the quality of life for people with neurodegenerative disorders via the eye-brain connection.



The Retitrack™ is an Eye Movement Monitor. It is intended for recording, viewing, measuring, and analyzing temporal characteristics of fixation and saccadic responses when viewing a visual stimulus.

NIRx Medical Technologies (Bronze Sponsor)

Booth 9

NIRx Medical Technologies, LLC is a globally recognized leader in providing comprehensive solutions for

functional near-infrared spectroscopy (fNIRS) research. The versatility of fNIRS has seen a significant increase in its application in vision science. The technique allows for the measurement of neural activity in the visual cortex and large-scale cortical networks and is useful in investigating the neural mechanisms underlying visual attention and perception. Additionally, fNIRS is employed in studying the effects of visual deprivation or visual training. Its non-invasive and user- and subject-friendly nature makes it an ideal tool for monitoring changes in neural activity during the development of the visual system in infants and children. Furthermore, it is increasingly used in researching changes in neural activity related to visual disorders and the changes resulting from treatment.



NIRx offers a complete range of research solutions, including a versatile multimodal hardware platform, advanced online and offline analysis software, expert technical and scientific support, and comprehensive training programs.

We are committed to supporting fNIRS researchers through our offices in Orlando, New York and Berlin, Germany. For further details on our solutions, please do not hesitate to contact us at +49 308 1453 5990 (EU), (+1) 321-352-7570 (US/Canada), or come and visit our booth at the VSS meeting.

Open Science Tools (Bronze Sponsor)

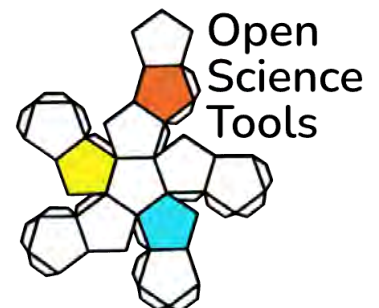
Booth 2

Open Science Tools created and maintains [PsychoPy](#), [PsychoJS](#) and [Pavlovía](#).

These tools are designed to make it as easy as possible to create high-precision experiments for lab-based or online studies, even running vision-science experiments and providing gamma-correction in browser-based studies. Stop by the booth to find out what's now possible – you might be surprised!

[PsychoPy](#) and [PsychoJS](#) are unusual in being open-source tools that are supported by a revenue stream, from our hosting and consultancy services, which means the tools are developed and supported by a full-time professional team. The best of both worlds!

We now also provide consultancy services, either to help generate your studies, or to provide training for your department or team. If you don't have time to write that next experiment, or to port your code over from `SomeOtherPackage`, but you do have some left over funding, then get in touch on consultancy@opensciencetools.org



Psychology Software Tools (Bronze Sponsor)

Booth 14

Psychology Software Tools – Developers of E-Prime 3.0 stimulus presentation software. E-Prime 3.0 now includes E-Prime Go for remote data collection! Integrate E-Prime with eye tracking and EEG with E-Prime Extensions for Tobii Pro, EyeLink, Net Station, and Brain Products. Use Chronos for millisecond-accurate

responses, sound output, and triggers to external devices. Chronos Adapters provide a simple connection to external devices, including Brain Products, ANT Neuro, BIOPAC, BioSemi, Neuroscan, MagstimEGI, NIRx, g.tec, Smart Eye and more. PST also provides solutions for fMRI research, such as Fiber Optic and Wireless Response Systems, Digital Projection System, and an MRI Simulator with head motion tracking. PST has a 35-year company history with 100,000+ users in 75 countries!



Psychonomic Society (Bronze Sponsor)

Booth 10

The Psychonomic Society is a community of over 4,300 cognitive and experimental psychologists from more than 60 countries around the world. Members include some of the most distinguished researchers in the field. Many are concerned with the application of psychology to health, technology, and education. What brings us together is that we study the basic, fundamental properties of how the mind works by using behavioral techniques to better understand mental functioning.



Our most innovative research uses converging methods from behavioral measurement, neuroscience, computational modeling and other fields to achieve our research goals. Members of the Society conduct research on questions concerning memory, learning, problem solving, decision making, language, attention, and perception. We also connect with research in biology, chemistry, statistics, computer science, medicine, law, and business.

We achieve our objectives by hosting meetings around the world, publishing seven world-class, peer-reviewed journals, disseminating our research, and funding workshops and symposia.

[Visit us online](#) and [Become a Member](#).

Rogue Research Inc. (Bronze Sponsor)

Booths 3 & 4

Rogue Research has been your partner in neuroscience research for over 20 years. As developers of the Brainsight® family of neuronavigation systems for non-invasive brain stimulation, we have helped make transcranial magnetic stimulation more accurate and more reproducible while keeping it simple and effective. 20 years and over 1000 laboratories later, Brainsight® continues to evolve to meet the needs in non-invasive brain stimulation.



Rogue Research has expanded beyond navigation to develop our own, next-generation, TMS device: Elevate™ TMS. Elevate™ TMS offers control over the pulse shape to ensure more reproducible excitatory or inhibitory effects on the targeted network. While Brainsight® ensures accurate targeting and Elevate™ TMS ensures reliable circuit interaction, Rogue Research is also developing a robotic positioner to ensure that the plan is accurately and efficiently carried out. The unique design ensures accuracy, repeatability and simplicity.

Rogue Research also offers our Brainsight® Vet line of neurosurgical and neuronavigation tools for animal research. Come see our navigated microsurgical robot, which is the most accurate animal stereotaxic system on the market. We also offer custom MRI compatible implants and a line of MRI coils and testing platforms.

WorldViz VR (Bronze Sponsor)

Booth 1

For 20 years, **WorldViz VR** has helped over 1500 universities, businesses and government organizations to conduct **leading edge research** with Virtual Reality.



Over the years, WorldViz VR has developed **Vizard**, a python-based platform that enables users to rapidly build 3D virtual reality applications that solve real world business and research challenges.

WorldViz will present SightLab VR, a fully GUI based tool that allows users to collect, review and **analyze eye tracking data** with support for all the major PC based VR eye tracking devices including HP Reverb Omnicept, Vive Pro Eye, Pupil Labs and Tobii VR. It will allow drag and drop adding of videos and 3D models, and many of the most used analytics methods are included into the provided templates.

Build a scene, run your experiment and review in minutes. Fully expandable and modifiable by using the GUI configurator or python code.

The WorldViz components allow integration of highly targeted **VR labs**, and we are happy to help customers configure their own labs, tailored to their specific needs.

Zeto, Inc. (Bronze Sponsor)

Booth 5

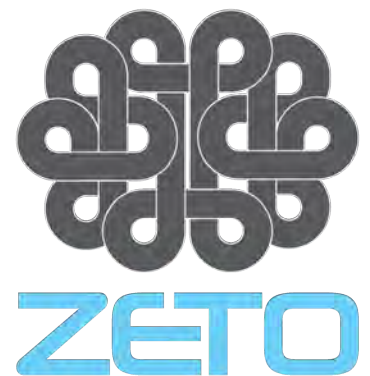
Zeto, Inc. is a privately held medical technology company located in Santa Clara, CA focused on transforming the way electroencephalography is done in clinical and research settings. Zeto's revolutionary FDA-cleared EEG platform brings the traditional EEG procedure to the 21st century by offering the WR19, a zero-prep, wireless, easy-to-wear headset with active, dry electrodes that can be positioned as per the 10-20 system.

The Zeto headset is backed by a cloud data and software platform, a real-time LSL-based API, and a TTL-based trigger device for ERP studies.

The company plans to leverage its platform technology to improve access and quality to medical EEG testing and to enable and improve adjacent biomedical research and clinical trials.

Learn more about our research platform: <https://zeto-inc.com/academic-discount/>

Contact us: research@zetoinc.com



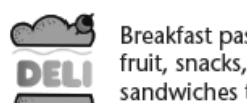
TRADEWINDS ISLAND RESORT DIRECTORY

DINING & ENTERTAINMENT

 Starbucks™ coffee and cocktails . . . 1

 Family Sports Pub, Lunch, Dinner 'til Late Night . . . 21

 Breakfast & Dinner – Casual dining, steak & seafood, sunset view . . . 21

 Breakfast pastries, fruit, snacks, beer/wine, sandwiches to order 1

 Lunch, tropical drinks, and sunset dinners . . . 12

 Casual indoor and outdoor dining for all meals 29

 Pizza, wings, ice cream and sundaes 23

 Exceptional cuisine for Lunch and Dinner, Sunday Brunch Buffet . . . 4

 Live entertainment, bottled beer and full bar 14

 Tiki bar, tropical drinks, Lunch and lite bites . . . 22

 Starbucks™ coffee, on-the-go-breakfasts, cocktails 26

 Tropical drinks, beer, wine and appetizers . . . 31

MEETING & EVENT FACILITIES, ISLAND GRAND

Banyan	5
Banyan Breezeway	5
Bird Key	2
Blue Heron, 2nd floor	3
Board Room, 2nd floor	3
Breck Deck	22
Chart Room, 2nd floor	3
Citrus	5
Compass Room, 2nd floor	3
Cypress Villa, 2nd floor	17
Garden Courtyard	6
Glades	5
Grand Palm Colonnade	1
Horizons East & West	20
Horizons Portico	19
Indian Key	2
Island Ballroom	2
Jacaranda Beach	9
Jacaranda Hall	5
Jasmine	5
Long Key	2
Palm	5
The Pavilion	18
Pirate Island	16
Royal Tern, 2nd floor	3
Sabal	5
Sawgrass	5
Sawyer Key	2
SeaBreeze Terrace	11
South Beach Lawn	8
Snowy Egret, 2nd floor	3
Tarpon Key	2

OFFICES, BUSINESS

ATM	1, 21, 26
Business Center	Lobby

RECREATION

TradeWinds Adventure Center	11
Guy Harvey Outfitter	27
Cabana Hut	10, 30
Chess Set, Lifesize	6
Fitness Centers	24, 26
KONK for Camps & Crafts	17
Mini-Golf	7
Paddleboat Landings	15
Pet Play Zone	7
Pirate Island	16
Sauna	13
Tennis Reservations, Racquets	11
Towels for beach & pool	11, 30
Game Room Arcade	17
Volleyball	10
Watersports	11
Whirlpools	11, 28

SHOPS & SALON

Beaker's Tropical Outfitters	20
Body Works Spa & Fitness	24
Deli & General Store	1
Guy Harvey Outfitter Shop	27

GUY HARVEY OUTPOST

Fitness Center, 3rd floor	26
Guy Harvey Outfitter Shop	27
Guy's Gulfside Grill	29
Li'l Guys Activities	30
North Terrace Courtyard	32
Oasis Adult Courtyard	28
Perks Up Coffee & more	26
Sunset Beach	31
SandBar	31

Tradewinds Island Grand Resort

