

PROGRAMME



Thursday, 31 August 2023

8:30 - 10:00 Symposia

Room:	Symposium 7: The Interplay Between Vision and Action <i>Chair: Joo-Hyun Song</i>	Symposium 8: Emergent categories of visual objects and scenes in infancy and deep neural networks: Brain constraints, learning, training, and language <i>Chair: Liuba Papeo & Jean-Remy Hochmann</i>	Room:
Aphrodite Hall			Adonis
8:30	Working memory load influences sensorimotor simulation during reading. <i>Laura E. Thomas</i>	Footprints of visual cortex organization in early object categorization <i>Céline Spriet, Jean-Rémy Hochmann, Liuba Papeo</i>	
8:50	Integrating Mental And Sensorimotor Workspaces <i>Joo-Hyun Song</i>	Multivariate assessment of visual category representations in the infant brain from EEG <i>Siying Xie, Radoslaw Cichy</i>	
9:10	Beyond labeling THINGS-IN-3D: Is one visual hierarchy enough? <i>Maryam Vaziri-Pashkam</i>	Using deep neural networks as a model for the development of human visual categories <i>Hans Op de Beeck</i>	
9:30	Computational modelling of continuous reaching tasks reveals novel relationships between visual target selection and execution of reaching movements <i>Dietmar Heinke</i>	Categorizing scenes based on gist emerges by 18 months <i>Maja Blesić, Agnes Kovacs</i>	

10:00 - 11:00 Coffee Break

Poster Sessions 7: Object perception and Scene Perception; Emotion & Social Talk

Object and Scene Perception Poster Session

High-level visual information of local fragments affects object recognition
Elsa Scialom, Udo Ernst, David Rotermund, Michael H. Herzog

The Temporal Dynamics of Size Constancy in Natural Scenes
Lu-Chun Yeh, Daniel Kaiser, Elisa Battistoni, Surya Gayet, Marius Peelen

Is peripheral object discrimination relying on visual imagery?
Carolina Maria Oletto, Giulio Contemori, Luca Battaglini, Marco Bertamini

The probabilistic nature of coding episodic memories
Jozsef Fiser, David Magas

Spontaneously emerging structural constraints and top-down expectations jointly determine representational efficiency in a predictive coding network
Stefan Brugger, Rosalyn Moran, Christoph Teufel

Feature synergy is based on regional saliency during figure-ground segregation
Cordula Hunt, Günter Meinhardt

Are visual processing tendencies associated with a difference in Body Image Concern?
Elena Buß, Alexander Pastukhov, Claus-Christian Carbon

Using the Natural Scenes Dataset to identify brain regions responsive to the colour statistics of objects in natural scenes
Ian Pennock, Jenny Bosten, Anna Franklin

Task-independent allocentric representation of symmetry using polygons
Elena Karakashevska, Alexis Makin, Marco Bertamini

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Individual Differences in Internal Models Determine Scene Perception

Gongting Wang, Matthew Foxwell, Radoslaw Cichy, David Pitcher, Daniel Kaiser

The effect of natural scene statistics in static and dynamic synthetic images on perceived restoration and shape discrimination

Michelle Roberts, Carolyn Lee, Branka Spehar

AI versus CG, AI generated convincing materials in different shapes

Yuguang Zhao, Huib de Ridder, Jeroen Stumpel, Maarten Wijntjes

Influence of curvature and visual context on the perception of artificial human skin appearance

Soyogu Matsushita

Animal, plant or mineral: disentangling object concepts from visual features

Sophia Shatek, Thomas Carlson

Cardinal repulsion biases of real-world objects in three dimensions

Anantaporn Sena, Rosanne Rademaker, Chaipat Chunharas

Out of sight: The Impact of Hidden Objects on Visual Search in 3D Scenes.

Jonathan Niklas Mader, Erwan David, Melissa Lê-Hoa Vo

Do changes in the ability to perceive shape from shading index cognitive function? Evidence for sexspecific effects.

Beverley Pickard-Jones, Ayelet Sapir

Untangling the contributions of conceptual similarity and scene entropy in the success of meaning maps

Maarten Leemans, Claudia Damiano, Johan Wagemans

Semantic Contrast: Quantifying the Change in Semantic Content Across Images

Sophie Heer, Marek A. Pedziwiatr, Peter Bex, Antoine Coutrot, Isabelle Mareschal

Towards Fairly Evaluating Object Detection Performance in Humans and Machines

Vasha DuTell, Anne Harrington, Ayush Tewari, Mark Hamilton, Simon Stent, William T. Freeman, Ruth Rosenholtz

A flower in a vase and a plant in a pot: The visual representation of spatial relations

Sofie Vettori, Jean-Rémy Hochmann, Liuba Papeo

Spatial-frequency channels for object recognition by neural networks are twice as wide as those of humans. An explanation for shape bias?

Ajay Subramanian, Elena Sizikova, Najib J. Majaj, Denis G. Pelli

Symmetry Detection in Images of Natural Scenes by Humans and Machines

Lisa Koßmann, Gonzalo Muradás Odriozola, Christophe Bossens, Johan Wagemans

LangMark – object annotations for scenes with semantic inconsistencies to connect language models to vision science

*Marek A. Pedziwiatr, Sophie Heer, Peter Bex, Antoine Coutrot, Melissa Le-Hoa Võ, Isabelle Mareschal***Emotion & Social Talk Poster Session**

Investigating the Emotional Responses and Preferences of Individuals to AI-Generated visual stimuli

Simone Grassini, Mika Koivisto

To investigate the influence of body perception and body satisfaction on eating attitudes

Xing-Rou Wong, Pin-Yun Lin, Chia-Yao Lin, Li-Chuan Hsu, Yi-Min Tien

Online food choices: When does “recommended by” work?

Daniele Catarci, Lea Laasner Vogt, Swen Jonas Kühne, Lars Bläuer, Ester Reijnen

Influence of context on facial expression perception in an at-risk sample of children with emotional difficulties

Ozge Gezer, Christoph Teufel, Stephanie Van Goozen, Elisabeth Von Dem Hagen

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Impact of morality on the attentional blink

Risako Shirai, Hirokazu Ogawa

Seeing Trouble: Relationship between Sensitivity and Threat in response to Ambiguous Emotional Expressions

Deepshikha Prasad, Mary-Ellen McKendrick, Louise Delicato, Gnanathusharan Rajendran

A model of the interference caused by the presence of others: the role of others' intention.

Gabriele Pesimena, Alessandro Soranzo

A model of the interference caused by the presence others

Alessandro Soranzo, Gabriele Pesimena

Is imagination necessary for emotional engagement with verbal storytelling?

Noha Abdelrahman, Francesco Mantegna, Maria Pombo, David Melcher

Real or fake? The authenticity evaluation of photojournalistic images depends on the viewers' political beliefs.

Beata Pacula-Leśniak, Joanna Pilarczyk, Tomasz Kulczycki, Michał Kuniecki

Different leveraging of contextual visual information during the prediction of social and non-social perceptual events in typical and atypical neurodevelopment.

Alessandra Finisguerra, Sara Boscarol, Lucia Amoruso, Tiziana Zilli, Antonio Narzisi, Cosimo Urgesi

Are social interactions preferentially attended in real-world scenes? Evidence from eye-tracking

Mahsa Barzy, Eugene McSorley, Rachel Morgan, Richard Cook, Katie Gray

Art & Aesthetics Poster Session

Low aesthetic value ("ugliness") without semantics

C. Alejandro Parraga, Marcos Muñoz González

The effects of art expertise on the relationship between perceived object stability and aesthetic judgments

Emika Okumura, Toshimasa Yamanaka

The effect of agency on the beauty of images

Anna Bruns, Denis Pelli

Exploring preference for symmetry using the method of production

Andreas Gartus, Helmut Leder

Effects of Spatial Ability on Complexity Preference in the Aesthetic Appreciation of Chinese Landscape Paintings

Kunlin Jin, Kang Zhang, Rongrong Chen

The automaticity of 'seeing-in': Pictorial depth cues influence judgments of surrounding spatial relationships even when task-irrelevant

June Huang, Kexuan Zhang, Benjamin van Buren

Objective vs subjective order and complexity in relation to aesthetics tested with evolutionary algorithms

Elisabeth Van der Hulst, Alexander Pastukhov, Eline Van Geert, Claus-Christian Carbon, Johan WAGEMANS

Aesthetic experience in museum vs. laboratory: psychophysiological and behavioral evidence

Serena Castellotti, Ottavia D'Agostino, Maria Del Viva

Thursday, 31 August 2023

11:00 - 13:00 **Talk Sessions 7: Contrast, Lightness, Adaptation; Real-world settings & VR**

Room: Adonis

Lightness, Brightness, Contrast & Adaptation session
Chair: Luca Battaglini

Real-world settings & VR Papers session

Room: Aphrodite Hall
Chair: Tamara Watson

11:00 Contrast Modulation Effects for Different Flanker Contrasts, Separations, and Eccentricities
Luca Battaglini, Giulio Contemori, Gianluca Campana, Charles Wani Victor Ladu, Giuditta Cossi, Marcello Maniglia

Navigating Virtual Worlds: A Graph Theoretical Analysis of Eye Tracking Data Recorded in Virtual Reality to Examine Spatial Navigation
Jasmin L. Walter, Vincent Schmidt, Lucas Essmann, Sabine U. König, Peter König

11:15 Achromatic Increment and Decrement Contrast Processing Differs Qualitatively
Rhea Eskew, Yangyi Shi

Toward Automatic Detection of Gaze Events in Natural and Dynamic Viewing
Ashkan Nejad, Gera de Haan, Joost Heutink, Frans Cornelissen

11:30 Two kinds of top-down effects in an edge integration model of lightness
Michael Rudd

Presence in VR predicts hedonic, but not practical user experience rating in an orthoptic psychomotor learning simulation.
Georg Meyer, Jignasa Mehta, David Newsham, Ryan Ward, Simon Campion

11:45 Seeing in the dark: face recognition, reading and visual crowding under scotopic conditions
Deena Elul, Ayelet Mckyton, Netta Levin

The effects of depth of field on attention in whilst exploring a virtual environment
Szonya Durant, Doga Gulhan, Harsimran Suri, Joshua Haider-Smith, Kiah Vekaria

12:00 Adaptation to invisible flicker induces spatial distance compression
Ljubica Jovanovic, Paul McGraw, Neil Roach, Alan Johnston

Investigating obstacle avoidance for real and pictorial obstacles
Martin Giesel, Daniela Ruseva, Constanze Hesse

12:15 Transfer of motor and CD gain adaptation in the vicinity of the adaptation target
Jana Masselink, Markus Lappe

Head movements influence visual stability across gaze shifts
Eckart Zimmermann, Manuel Bayer

12:30 Posture aftereffects – Does the visual system adapt to different representations of posture?
Eva Tzschaschel, Kevin R. Brooks, Ian D. Stephen

Hemianopia, cycling and scanning behaviour in virtual and real environments
Eva Postuma, Gera de Haan, Ashkan Nejad, Joost Heutink, Frans Cornelissen

12:45 Sensorimotor Adaptation while Navigating in Uncertain Virtual Environments
Benedikt Kretzmeyer, Meaghan McManus, Constantin Rothkopf, Katja Fiehler

Effect of saliency on gaze behaviour in VR Visual Search
Tamara Watson, Niklas Stein, Markus Lappe, Szonya Durant

13:00 - 14:30

Lunch Break

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14:30 - 16:00 Talk Sessions 8: Object perception; Emotion & Social

Room: Aphrodite Hall	Object perception session Chair: Tijl Grootswagers	Emotion & Social Talk session Chair: Jelena Ristic	Room: Adonis
14:30	Using AI-generated synthetic images to drive object responses in the human brain <i>Tijl Grootswagers, Genevieve Quek, Jessica Chin, Manuel Varlet</i>	Neural mechanisms of costly helping in the general population and mirror-pain synesthetes <i>Kalliopi Ioumpa, Selene Gallo, Christian Keysers, Valeria Gazzola</i>	
14:45	Human shape perception spontaneously discovers the biological origin of never-before-seen stimuli <i>Guido Maiello, Kira Dehn, Frieder Hartmann, Yaniv Morgenstern, Sara Joy Hawkins, Thomas Offner, Joshua Walter, Thomas Hassenklöver, Ivan Manzini, Roland Fleming</i>	The Influence of Hatha Yoga on Stress, Anxiety, and Suppression <i>Bence Szaszko, Rebecca Rosa Schmid, Ulrich Pomper, Mira Maiworm, Sophia Laiber, Hannah Tschenett, Urs Nater, Ulrich Ansorge</i>	
15:00	The representation of diverse visual material properties in the human brain <i>Hua-Chun Sun, Philipp Schmidt, Jacob Cheeseman, Alexandra Schmid, Martin Hebart, Roland Fleming</i>	Neural dynamics supporting context-based social perception in health and disease <i>Lucia Amoruso, Shuang Geng, Nicola Molinaro, Santiago Gil-Robles, Garazi Bermudez, Iñigo Pomposo, Ileana Quiñones, Manuel Carreiras</i>	
15:15	Interactive images for visual material communication <i>Maarten Wijntjes, Aaron Kaltenmaier</i>	Social Perceptual Grouping is Sensitive to Group Size <i>Jelena Ristic, Luowei Yan, Clara Colombatto</i>	
15:30	Behavioral detectability of optogenetic stimulation of inferior temporal cortex varies with the visibility and size of concurrently viewed objects. <i>Rosa Lafer-Sousa, Karen Wang, Reza Azadi, Simon Bohn, Emily Lopez, Arash Afraz</i>	Integrative processing in artificial and biological vision predicts the perceived beauty of natural images <i>Sanjeev Nara, Daniel Kaiser</i>	

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16:15 - 17:15 **Poster Sessions 8: Contrast, Lightness, Adaptation; Real-world settings & VR**

Contrast, Lightness, Adaptation Poster Session

Glare's calculated patterns of light on retinal receptors

Alessandro Rizzi, John McCann

Modelling age-related changes in spatio-chromatic contrast sensitivity across a large luminance range

Maliha Ashraf, Sophie Wuergler, Jasna Martinovic, Rafal Mantiuk

Adaptative binocular disparity behaviours in response to contrast changes in a reading-like task

Ruomeng Zhu, Richard Shillcock

Contour erasure reveals local mechanisms underlying perceptual filling-in

Mark Greenlee, Yih-Shiuan Lin, Chien-Chung Chen

Individual differences in crowding and their impact on feature and conjunction search

Ines Verissimo, Christian Olivers

Impact of crowding on visual appearance in Amblyopia

Angela Gomes Tomaz, Sunwoo Kwon, Dennis M. Levi, Wolf M. Harmening, Bilge Sayim

Temporal modulation of redundancy masking

Mert Can, Bilge Sayim

Is visual angle equal to retinal angle?

Hans Strasburger, Michael J. Simpson

AIM+ (Angular Indication Measurement) Efficient Assessment of Multidimensional Functions

Peter Bex, Jan Skerswetat

Shape from shading consists of pre-attentive and attentive processes

Ayelet Sapir

Intra-object brightness contrast influences perceived time to collision

Christoph von Castell, Carolin Sweeney, Heiko Hecht

Visual function in non-overlapping visual field defects: dichoptic experiments in healthy subjects with simulated scotomas

Mehrdad Gazanchian, Frans W. Cornelissen, Nomdo M. Jansonijs

Theoretical consequences of the manias variation of slc

Predrag Nedimović, Sunčica Zdravković

Exploring the contrast sensitivity function through noise equivalent contrast

Hannah E. Broadbent, Eric Liggins

Effects of Delay Adaptation on Multisensory and Motor Integration for Duration Reproduction

Lingyue Chen, Zhuanghua Shi

No pooling in crowding: Deterioration of orientation discrimination with increasing numbers of identical Gabors

Li L-Miao, Sabrina Hansmann-Roth, Wolf M. Harmening, Bilge Sayim

Confidence in the Rapid Assessment of Peripheral Crowding Strength

Dilce Tanriverdi, Frans W. Cornelissen

Crowding reduces reading speed and comfort

Maria Pombo, Minjung Kim, Denis G. Pelli

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Redundancy masking in regular and irregular patterns

Bilge Sayim, Sabrina Hansmann-Roth

What is gloss?

Roland Fleming

Glare from LED illuminants of different colour temperature under simulated driving conditions at night

Beatriz M Matesanz, Eduardo G Vicente, Miguel Rodriguez-Rosa, Luis A Issolio, Isabel Arranz

Identifying the principles of causal perception through visual adaptation transfer

Jonathan F. Kominsky

Audiovisual spatial ventriloquism is reduced in musicians.

Matthew O'Donohue

Transfer of refference signal adaptation across smooth pursuit speeds

Rozana Ovsepian, David Souto, Alexander C. Schütz

Effect of spatial context on perceived walking direction

Chang Chen, W. Paul Boyce, Colin J. Palmer, Colin W.G. Clifford

Second Order Chromatic Contrast Sensitivity

Marcelo Fernandes Costa, Otávio Correa Pinho, Leonardo Dutra Henriques

Feed-forward projections from V1 to EBA sustain body visual adaptation: a ccPAS study

Cosimo Urgesi, Giulia D'Argenio, Alessandra Finisguerra

Individual differences in change detection and the motion aftereffect

Kristina Zeljic, Joshua Solomon, Michael Morgan

Neurophysiological correlates of foveal crowding and tagging

Ziv Siman Tov, Maria Lev, Uri Polat

Unveiling the foveal rod scotoma through an afterimage

Lisa Widmayer, Hui Men, Alexander C. Schütz

Real-world Settings & VR Poster Session

Investigating the Impact of Audio-Visual Training in Virtual Reality on Learning Outcomes through Multisensory Integration: An Analysis of fMRI and DTI Data

Kholoud Alwashmi, Georg Meyer, Fiona Rowe

Systematic Bias in Object Location Memory Across Perspectives: Evidence from Immersive Virtual Reality

Vladislava Segen, Marios Avraamides, Thomas Wolbers, Jan Wiener

Facial expression recognition modulated by forward and backward steps in virtual reality

Yugo Kobayashi, Hideki Tamura, Shigeki Nakauchi, Tetsuto Minami

Recording fixation onset ERPs in virtual reality

Debora Nolte, Marc Vidal de Palol, Ashima Keshava, John Madrid, Anna L. Gert, Peter König

Depth Cues Reduction and Perception of Audiovisual Synchrony in Virtual Reality

Victoria Korshunova-Fucci, Hsiao Ming Fan, Jinqi Liu, Raymond H. Cuijpers

Teleporting impairs scene recognition in virtual environments.

Christodoula Gabriel, Adamantini Hatzipanagioti, Alexia Galati, Savvas Avraam, Marios Avraamides

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Stride length decreases during overground walking while wearing a head mounted display

Maximilian Stasica, Gregor Schwinn, André Seyfarth

Modulation of Postural Control and Somatosensory Processing via Predictability in a Virtual Moving Room

Fabian D. Wachsmann, Dimitris Voudouris, Katja Fiehler

The type of interaction with virtual environment influences on presence effect

Yulia Rogoleva, Artem Kovalev

Vertical vergence and screen alignment with see-through head-mounted displays

Agostino Gibaldi, Yinghua Liu, Christos Kaspiris-Rousellis, Madhumita Mahadevan, Björn N. S. Vlaskamp, Gerrit W. Maus

17:15 - 18:15 Business Meeting

20:00 - 22:00 Farewell Party - Pantheon Ballroom A