ECVP 2023

European Conference on Visual Perception

Sunday, 27 Aug

10:30 - 12:30 Tutorials

Tutorial Room: Adonis

10:30 Spatial Cognition and Artificial Intelligence: Methods for In-The-Wild Behavioural Research in Visual Perception Mehul Bhatt, Vasiliki Kondyli

Tutorial Room: Zeus

- 10:30 Understanding Glare's transformation of scene luminance into the different pattern on the retinal receptors Alessandro Rizzi, *John McCann*
- 14:00 16:00 Tutorial session

Tutorial Room: Adonis

14:00 Modelling the spatio-temporal properties of eye movements: methods, devices and applications Alessandro Grillini

Tutorial Room: Zeus

14:00 Visual psychophysics with OpenSesame Sebastian Mathôt

> Tutorial Room: Poseidon

17:00 - 18:30 Perception Lecture Room: Aphrodite Hall

Prof. Manuela Piazza

University of Trento, Italy

Talk title: Navigating semantic spaces: recycling the brain GPS for higher-level cognition.

19:00 - 21:00 Welcome Reception Room: Aphrodite Gardens

Monday, 28 Aug

8:30 - 10:00 Symposia

Symposium 1: Dynamic vision and its development: a symposium in honour of Oliver Braddick Chair: David Burr & Johannes Zanker Room: Aphrodite Hall

- 8:30 Dynamic vision and its development: a symposium in honour of Oliver Braddick. *janette Atkinson*
- 8:50 Development and plasticity of motion circuitry in human infants maria concetta morrone
- 9:10 Dynamic vision and its development: spatial coding and seeing in depth Marko Nardini
- 9:30 Two motion systems in the primate brain. Anthony Movshon

Symposium 2: Vision beyond cones: uncovering the role of rods and melanopsin in perception Chair: Pablo Barrionuevo Room: Adonis

- 8:30 Multi-primary high dynamic range displays for vision science: implementation, challenges, and psychophysics *Allie Hexley*
- 8:45 Filling-in of the foveal rod scotoma under mesopic viewing conditions *Hui Men*
- 9:00 The contribution of rods and cones to brightness induction *Pablo Barrionuevo*
- 9:15 How does melanopsin help us to see? *Tom Woelders*
- 9:30 Melanopsin in complex scenes: Brightness and color interactions *Tanner DeLawyer*

10:00 - 11:00 Poster Sessions 1: Eye movements and Pupillometry; Perception & Action

Eye Movements and Pupillometry Poster Session

Confirmation of required specifications for cognitive function tests based on eye-movement-measuring devices *Mitsunobu Kunimi*

Fixational Eye Movements As Bio-Markers For Visual Acuity Michael Lellouch, Ohad Ben-Shahar

Eye Movement Patterns in Visual Expertise for Print *Evgenia Kouki*, Evangelos Paraskevopoulos, George Spanoudis, TIMOTHY C. PAPADOPOULOS

Eye movements in facial expression recognition *Sofya Klumova*, Galina Menshikova

Gaze characterization of ophthalmic lenses wearers with a new algorithm of pupil position estimation *Clara Benedi-Garcia*, Pablo Concepcion-Grande, Marta Alvarez, Carmen Cano, Jose Miguel Cleva, Eva Chamorro

Fixation Stability in Reading and Non-reading Task *Evita Serpa*, Gunta Krumina, Evita Kassaliete, Aiga Svede, Ilze Ceple, Liva Volberga, Rita Mikelsone, Asnate Berzina, Viktorija Goliskina, Sofija Vasiljeva, Marija Koleda, Madara Alecka, Elizabete Ozola, Daniela Toloka

Transsaccadic perception of changes in image regularity *Nino Sharvashidze*, Matteo Valsecchi, Alexander C. Schütz

Feature-tuned properties and underlying neural mechanisms of short-latency stimulus-driven ocular position drift responses *Tatiana Malevich*, Fatemeh Khademi, Tong Zhang, Matthias P. Baumann, Antimo Buonocore, Ziad M. Hafed

Spatial and temporal image statistics of fixated vs non-fixated regions in viewing artworks *Branka Spehar*, Vicente Estrada-Gonzalez, Michael Garbutt, Scott East

Coupling of eye movement to the visuospatial representations *Ziva Korda*, Sonja Walcher, Christof Körner, Mathias Benedek

WALD-EM: Wald Accumulation for Locations and Durations of Eye Movements *Simon Kucharsky*, Ingmar Visser, Maartje Raijmakers

Fixational eye movements form fine stereoacuity Anna Ptukha

Effects of the nature of the context on contextual saccadic adaptation *Maxime Martel*, Laurent Madelain

Exploring the Relationship Between Gaze and Movement Transitions During Natural Human Walking on Different Terrains Christiane Wiebel-Herboth, *Martina Hasenjäger*

Comparison of saccades in athletes and non-athletes Angelina Ganebnaya, Jekaterina Berkova, Alona Purmale, Līga Puhova, Mariya Misri, Svetlana Semjonova, Alīna Kucika, Davids Davis Gailitis, Atis Kovaļovs, Aiga Švede

Developing an Indicator of Cognitive Load Using Pupillometry Daniel Frazer, John Cass, Gabrielle Weidemann, Tamara Watson

Vision relaxation with a new device EyeRoll *Līga Puhova*, Aiga Švede, Svetlana Semjonova, Alīna Kučika, Angelina Ganebnaya, Dmitry Gromov, Kulsum Baig Fatima

Dissociating temporal expectations in the perceptual and oculomotor domains *Neil Roach*, Ahmad Syazwan Muhammad Kamal, Paul McGraw, Chris Scholes

Pupil Size Reveals Imagination: Pupillary Response in Visual Imagery *Sin Wan, Sharon Hon*, Sing-Hang CHEUNG

Is Eye Movement Latency Variation as a Predictor of Cognitive Impairment ? *Trevor Crawford*, Megan Polden

Effect of eye movements and finger pointing on auditory spatial perception *Saranya Tarat*, Chaipat Chunharas, Sedthapong Chunamchai

Predicting Multiple-Target Search Performance Using Eye Movements and Individual Differences *Kayley Birch-Hurst*, Alice M Jones, Angela Ong, Kayleigh M Stoker, Melvyn L Smith, Wenhao Zhang, Kait Clark

Sight translation in L2: evidence from eye-tracking *Tatiana Petrova*

Development of functional spatial span measure in reading *Natália Máximo*, Victoria Menegon, Marcelo Fernandes Costa

The use of progressive lenses while going upstairs or downstairs: an eye-tracker study *Amelia Gonzalez*, Clara Benedi-Garcia, Pablo Concepcion-Grande, Jose Miguel Cleva, Eva Chamorro Robust storage for a large variety of stimulus features across saccades, but not across peripheral-tofoveal retinal shifts during fixation *Arne Stein*, Lukasz Grzeczkowski, Martin Rolfs

Pupillary responses to perceived glossiness and attractiveness *Hideki Tamura*, Shigeki Nakauchi, Tetsuto Minami

Verbal labels influence target identification process in visual search Maxim Morozov

I spy with my little eye... an anchor object! How anchor objects modulate eye movements during visual search

Deliane Bechar, Aylin Kallmayer, Melissa Lê-Hoa Võ

Individual differences in gaze strategies when performing the same task: an example from stair climbing *Andrea Ghiani*, Daan Amelink, Eli Brenner, Ignace Hooge, Roy Hessels

Looking versus searching: Inhibition of return in an extended saccade sequencing paradigm *Christof Körner*, Margit Höfler, Florian F. Thaler, Iain D. Gilchrist

Does individual gaze lead to individual visual representations? *Petra Borovska*, Benjamin de Haas

A pupillometry study of reward and uncertainty in exploratory decision making *Zoe He*, Maëva L'Hôtellier, Alexander Paunov, Dalin Guo, Florent Meyniel, Angela Yu

Pupil responses reveal detection rates beyond reports in choice blindness *Pablo Grassi*, Emre Baytimur, Lena Hoeppe, Andreas Bartels

Microsaccade size reflects spatial demands on internal selective attention in the oculomotor system *Baiwei Liu*, Zampeta-Sofia Alexopoulou, Anne Zonneveld, Freek van Ede

Perception & Action Poster Session

Temporal dynamics of size constancy for perception and action with real objects at real distances *Simona Noviello*, Saman Songhorabadi Kamari, Juan Chen, Chao Zheng, Angelo Pisani, Elena Franchin, Enrica Pierotti, Elena Tonolli, Simona Monaco, Louis Renoult, Irene Sperandio

Visual perception can learn from action. A study of cross-modal cue recruitment. *Lionel Louiset*, Timothy Carroll, Guy Wallis

Lexical Access to Function Understanding is Influenced by the Objects Utilized for an Action *Lea Alexandra Müller Karoza*, Sandro Luca Wiesmann, Melissa Lê-Hoa Vo

Adaptation of forearm orientation inhibited by visual information Atsuki Higashiyama

Assessment of biophilic design and impact on visual perception in patient rooms *Maria Englezou*, Kleanthis Neokleous, Fotos Frangoudes, Kalli Koulloufidou

Obstacle Perception: A Heatmap-based Comparison of Human and Machine Alignment Focus Points *Aikaterini Karakasidi*, Marios Thoma, Periklis Perikleous, Harris Partaourides, Zenonas Theodosiou, Loizos Michael, Andreas Lanitis

Effects of accuracy demands and light level on hand movements in a grasp-and-place task *Constanze Hesse*, Martin Giesel

Exploratory hand movements affect perceived material attributes in a dimension-specific way Fatma Kılıç, *Dicle Dövencioğlu*

Slightly perturbing the arm influences choices between multiple targets *Veronika Hadjipanayi*, Eli Brenner, Emily M. Crowe

Effects of dynamic alterations of depth cues during continuous dynamic interaction *Francesca Peveri*, Silvio Paolo Sabatini, Andrea Canessa

Variation in the location of the visual egocentre measured using a monocular and binocular sighting task *Yalige Ba*, Paul McGraw, Timothy Ledgeway

10:00 - 11:00 Coffee Break

11:00 - 13:00 Talk Sessions 1: Attention & Clinical populations

Attention session Chair: Rosanne Rademaker Room: Aphrodite Hall

- 11:00 Manipulating attentional priority creates a trade-off between memory and sensory representations in human visual cortex Rosanne Rademaker, John Serences
- 11:15 Self-initiation of attentional shift during visual search Dengzhe Hou, Sai Sun, Yoshiyuki Sato, Yasuhiro Hatori, Chia-huei Tseng, Satoshi Shioiri
- 11:30 Statistical Learning Alters the Latent Saliency of Attentional Priority Maps: As Revealed via Pinging and ERP's Dock Duncan, Dirk van Moorselaar, Jan Theeuwes

11:45 Object-based and salience-based attention development: evidence from free-viewing in infants and adults

Ingmar Visser, Maartje Raijmakers

- 12:00 Increasing saccadic vigor with reward: effects on main sequence, latency and presaccadic attention *Lukasz Grzeczkowski*, Oliver Steiner, Madeleine Gross, Martin Rolfs
- 12:15 Effect of Target-Distractor Similarity on Attentional Modulation in the Human Visual Cortex *Narges Doostani*, Gholam-Ali Hossein-Zadeh, Radoslaw Martin Cichy, Maryam Vaziri-Pashkam
- 12:30 Perceptual coupling, not binocular rivalry, requires attention. Alexander Pastukhov, Claus-Christian Carbon, Malin Styrnal
- 12:45 Dissociable roles of human frontal eye fields and early visual cortex in presaccadic attention evidence from TMS *Nina Hanning*, Antonio Fernández, Marisa Carrasco

<u>Clinical aspects of vision session/Clinical populations</u> Chair: Luca Tarasi Room: Adonis

- 11:00 The four factors of visual hypersensitivity: definition and measurement *Alice Price*, Rebecca Oates, Petroc Sumner, Georgina Powell
- 11:15 Detecting and delineating visual field defects based on free-viewing in glaucoma *Henning Schulte*, Birte Gestefeld, Jan-Bernard Marsman, Jeroen Goossens, Frans Cornelissen
- 11:30 Is there a common factor underlying visual abilities in patients with AMD? Simona Garobbio, Ursula Hall, Philipp Anders, Hendrik Scholl, Michael H. Herzog
- 11:45 Visual flow and complexity as triggers and rehabilitation stimuli for dizziness *Nathan Goodwin*, Petroc Sumner, Fernando Loizides, Hannah Derry-Sumner, Georgina Powell
- 12:00 Long-term adaptation to a visual field defect improves functional vision: evidence from a continuous visual tracking task *Minke de Boer*, Anne Vrijling, Remco Renken, Jan-Bernard Marsman, Alessandro Grillini, Carlo Enrico Petrillo, Joost Heutink, Nomdo Jansonius, Frans Cornelissen
- 12:15 Status of symmetry perception following prolonged visual deprivation *Priti Gupta*, Meghna Rao, Dhun Verma, Manvi Jain, Chetan Ralekar, Suma Ganesh, Pawan Sinha
- 12:30 Autistic and schizotypal traits shape neural markers of predictive inference *Luca Tarasi*, Maria Eugenia Martelli, Giuseppe di Pellegrino, Vincenzo Romei
- 12:45 Prosopagnosia is highly comorbid with developmental coordination disorder (DCD). *Katherine Maw*, Edwin Burns, Geoff Beattie
- 13:00 14:30 Lunch Break
- 14:30 16:15 Talk Sessions 2: Eye movements; Perception & Action

Eye movement session Chair: Sonja Walcher Room: Aphrodite Hall

- 14:30 When and why does eye behavior decouple from visual input during internally directed cognition? *Sonja Walcher*, Ziva Korda, Christof Körner, Mathias Benedek
- 14:45 Idiosyncratic eye-movement patterns affect behavioral and ERP correlates of face perception Nianzeng Zhong, Janet H. Hsiao, *William G. Hayward*
- 15:00 Eye movements during 'everyday hallucinations': Scaffolded attention as a function of covert (rather than overt) attention Joan Danielle K. Ongchoco, Brian Scholl
- 15:15 Tell me your point of view: Individual differences in gaze behavior predict individual differences in scene descriptions *Diana Kollenda*, Benjamin de Haas

Perception & Action session Chair: Paola Binda Room: Adonis

- 14:30 Grasping follows Weber's Law Kriti Bhatia, Christian Loewenkamp, Volker Franz
- 14:45 Active vision shapes ocular dominance Paola Binda, Cecilia Steinwurzel, Giulio Sandini, Maria Concetta Morrone
- 15:00 Linking the space in visual and haptics Liga Zarina, Jurgis Skilters, Solvita Umbrasko, Egle Zilinskaite-Sinkūniene
- 15:15 Actions are characterised by 'canonical moments' in a sequence of movements *Patricia Gough*, Nuala Brady, David McGovern
- 15:30 Causal Effects of Pupil Size on Visual Processing Sebastiaan Mathôt, Hermine Berberyan, Philipp Büchel, Veera Ruuskanen, Ana Vilotijević, Wouter Kruijne
- 15:45 Stochastic resonance reflects decisional, not sensory, suboptimalities in human vision *Carlo Paris*, Peter Neri
- 16:00 Gaze responses to visual perturbations during reaching *Dimitris Voudouris*, David Franklin

16:15 - 17:15 Poster Sessions 2: Attention & Clinical Vision Poster Sessions

Attention Poster Session

A new object versus rejuvenated object in visual attentional selection *Atsunori Ariga*

Effects of Interstimulus Competition on Attentional Target Selection in Conjunction Search *Rebecca Nako*, Nick Berggren, Martin Eimer

Behavioural and neural correlates of shifting within and between attentional domains *Daniela Gresch*, Sage E. P. Boettcher, Freek van Ede, Anna C. Nobre

Inhibition of salient but irrelevant distractor depends on search mode Nataša Mihajlović, *Sunčica Zdravković*

Non-image forming vision as measured through ipRGC-mediated pupil constriction is not modulated by covert visual attention *Ana Vilotijević*, Sebastiaan Mathôt

Drivers compensate for environmental complexity by attentional prioritization of safety-critical events *Vasiliki Kondyli*, Daniel Levin, Mehul Bhatt

Cognitive Components of Small and Large-Scale Foraging Behaviour *Emre Orun*, Carlo De Lillo, Robin Green

Examining Attention Patterns in Image Classification Tasks: A Comparison between Neural Networks and Humans Anna Antipova

Attentional effects on the P300 component of the event-related potential during fast visual stimulation *Julia Haldina*, Sven P. Heinrich

Cross-modal synchrony aids multitarget search *Ivan Makarov*, Runar Unnthorsson, Arni Kristjansson, Ian M. Thornton

Exploring Attentional Modulation Effects on the Perception of Complex Natural Stimuli: A Study on Human Faces Lisa-Marie Vortmann, Finn Radatz, Angela Yu

Changes in conflict-induced modulations of oblique effects in spatial attention *Kanyarat Benjasupawan*, Nithit Singtokum, Naphapa Panyanirun, Anantaporn Sena, Panchalee Sookprao, Sirawaj Itthipuripat, Chaipat Chunharas

The influence of attention on visual asymmetries in the foveola Samantha K. Jenks, Martina Poletti

The preparatory activation of attentional templates for the guidance of visual search and for the recognition of objects in non-search tasks *Gordon Dodwell*, Martin Eimer

'Attentional transplants' cause recipients to like images similarly to donors: Evidence for inter-observer commonalities in how attention drives preferences *Hong B. Nguyen*, Benjamin van Buren

A self-administered mobile assessment for Response Inhibition *Pornnapat Chernprateep*, Anantaporn Sena, Gann Boonyaprapatsara, Thitisa Sudayuworn, Pattarathorn Jongjarearnsuntikul, Waragon Phoosuwan, Natrada Rattanapong, Chaipat Chunharas, Anthipa Chokesuwattanaskul

Geistesblitz: Repetition priming of indirect attentional sets *Malin Styrnal*, Alexander Pastukhov, Claus-Christian Carbon, Arni Kristjansson

Size Modulation of Visual Attention Estimated by Steady State Visual Evoked Potential *Guangyu Chen*, Satoshi Shioiri

Facilitation effects and anisotropy of the attentional blink for targets presented in a rapid serial visual presentation sequence in the upper and lower visual fields. *Ichikawa Makoto*, Masataka Miyoshi

Attentional sustainability under different types of notifications *Anastasia Anufrieva*, Elena Gorbunova

Neural activities preceding self-initiated attention Satoshi Shioiri, Wei Wu, Kazuya Kobayashi, Dengzhe Hou, Shin Ono, Yoshiyuki Sato, Yasuhiro Hatori, Chia-Huei Tseng

Temporal regularities can be used to dynamically prioritise attentional templates during visual search. *Gwenllian C. Williams*, Sage E. P. Boettcher, Anna C. Nobre

Clinical Vision Poster Session

Similarities and differences in sensory hypersensitivity across 10 clinical conditions *Rebecca Oates*, Georgina Powell, Petroc Sumner, Abhay Ghaiwal, Charlotte Griffin, Alice Price

Visual fatigue and power spectral analysis of accommodative response in asymptomatic and symptomatic individuals *Rémi COQ*, Pascaline NEVEU, Richard LEGRAS

Objectively impaired developmental prosopagnosia cases are excluded when using liberal cognitive task-based diagnostic criteria *Edwin Burns*

Age-effects on gaze and hand movement when intercepting moving targets *Leonard Gerharz*, Dimitris Voudouris

Sensory responsiveness, core features of autism and alexithymia *Nuala Brady*, Madeleine Diepman

Mechanisms underlying visual discomfort and implications for urban greening *Olivier Penacchio*, Xavier Otazu, Arnold J. Wilkins, Sarah M. Haigh

Are people with anxiety traits more field dependent? *Li-Chuan Hsu*, Pei-Yun Lai, Pin-Yun Lin, Xing-Rou Wong, Chia-Yao Lin, Yi-Min Tien What is the neurological condition opposite to visual agnosia? *Charles Wu*

Receptive fields modulations following optic neuritis *Ruth Abulafia*, Pieter de Best, Adi Vaknin-Dembinsky, Panayiota Petrou, Atira Bick, Netta Levin

The effects of contrast modulation on peripheral visual acuity *Carlos R. Cassanello*, Neil W. Roach, Paul V. McGraw

The phenomenology of face blindness: A case study of developmental prosopagnosia *Erling Nørkær*, Tone Roald, Randi Starrfelt

Visual impairments in schizophrenia and schizoaffective disorder *Irina Shoshina*, Alice Karlova, Alice Kosikova, Zumrud Huseynova, Anna Fedorova, Marianna Tumova, Michael Ivanov

Predictions of sensorimotor contingencies is altered in the broad autistic phenotype *Antonella Pomè*, Eckart Zimmermann

Brain Indices of Visual Memory in Chronic Moderate-to-Severe TBI. *Eva Pettemeridou*, Fofi Constantinidou

MRI Biomarkers of Posterior Cortical Atrophy: A Single-Case Study *Caterina Annalaura Pedersini*, Aniol Santo-Angles, Omnia Hassanin, Luai Eldweik, Osama Abdullah, Bas Rokers

Investigating the Link between Language and Scene Knowledge: Insights from Eye Movements in Children with and without Developmental Language Disorder *Dilara Deniz Türk*, Daniela Bahn, Christina Kauschke, Melissa Le-Hoa Võ

Visual differentiation in dyslexic children: An eye-tracking study *Nicol Dostálová*

Eye tracking paradigm to identify saccade, pupil, and blink abnormalities in neurodegeneration *Maha Habibi*, Brian C. Coe, Donald C. Brien, Heidi C. Riek, Annette Janzen, Wolfgang H. Oertel, Douglas P. Munoz

Investigating Gaze Behavior among Older Adults with and without Mild Cognitive Impairment in a Naturalistic Task Alexandra Wolf

Different top-down modulation of prestimulus alpha power and frequency in Developmental Dyslexia *Alessia Santoni*, Giuseppe Di Dona, David Melcher, Laura Franchin, Luca Ronconi

What can eye movements tell us about the visual fields in children? Anna Boethun

Face Recognition and Reading in Congenital Achromatopsia *Ayelet McKyton*, Deena Elul, Netta Levin

Decentralized viewing behavior on facial photographs depicting Bell's palsy Dana Gudrun Rottleb, Helene Gunhild Schaefermeyer, Gregor Uwe Hayn-Leichsenring

Eye movements and gaze dynamics toward familiar and unfamiliar faces in congenital prosopagnosia *Adi mizrachi*, Galia Avidan, Orya Lancry, Yoni Pertzov

Loughborough University Concussion IDentification (LUCID): concussion diagnosis using smartphonebased eye tracking *Thomas Wilcockson*

16:15 - 17:15 Coffee Break

European Conference on Visual Perception

Tuesday, 29 Aug

8:30 - 10:00 Symposia

Symposium 3: Crowding: beyond fixed mechanisms Chair: Guido Marco Cicchini Room: Aphrodite Hall

- 8:30 Unlocking crowding: the impact of global configurations and ensemble statistics David Pascucci
- 8:45 Crowding: an optimizing phenomenon? *Guido Marco Cicchini*
- 9:00 Dissociating Representation from Access in Multilevel Crowding Mauro Manassi
- 9:15 What drives the elevation of crowding in clinical disorders of vision? John Greenwood
- 9:30 An enhanced Bouma model fits fifty people's visual crowding Denis Pelli

Symposium 4: Color Geometry Chair: Qasim Zaidi Room: Adonis

- 8:30 Geometry of the neural representation of color Bevil Conway
- 8:45 Neurometric colour space decoded from EEG signals. *Jasna Martinovic*
- 9:00 Categorical Colour Geometry Lewis Griffin
- 9:15 Color geometry and neural geometry *Qasim Zaidi*, Robert J. Ennis
- 9:30 The non-Riemannian nature of perceptual color space. *Roxana Bujack*

10:00 - 11:00 Coffee Break

10:00 - 11:00 Poster Sessions 3: Colour; Learning; Visual working memory

Colour Poster Session

Effects of light enhancement at 585nm wavelength on beauty reduction *Megumi Nishikawa*, Akiyoshi Kitaoka

Evaluation of classic colour constancy algorithms on spectrally rendered ground-truth *Matteo Toscani*, Giuseppe Claudio Guarnera, Tao Chen

Colour can be decoded from MEG frequency power *Lemona Xinxuan Zhang*, Jenny Bosten

Skin colour discrimination sensitivity is not predicted by haemoglobin oxygen saturation of skin *Sophie Wuerger*, Tushar Chauhan, Kaida Xiao

Does pupil dilation trigger a shift from rod-dominated vision to cone-dominated vision? *Veera Ruuskanen*, Sebastiaan Mathôt

From colour to position: how the visual system infers location from feature distributions. *Philippe Blondé*, Sabrina Hansmann-Roth, David Pascucci, Árni Kristjánsson

An online color vision test.

João M.M Linhares, Paulo Jorge Alves, José A.R. Monteiro, Andreia Gomes, Sérgio M.C. Nascimento

A computational model of accommodation control exploiting chromatic aberration *Francisco M. López*, Judith Massmann, Bertram E. Shi, Jochen Triesch

Development of a Simultaneous Selection Colour Vision Test Leonardo Henriques, Givago Souza, Marcelo Fernandes Costa, Dora Ventura

Amodal completion of color *Dejan Todorovic*, Dejan Todorovic

Learning Poster Session

Visual Perceptual Learning of Feature Conjunctions Leverages Non-linear Mixed Selectivity Behnam Karami, Caspar M. Schwiedrzik

Prolonged exposure to sub-threshold contrasts does not drive perceptual learning *Adelina-Mihaela Halchin*, Christoph Teufel, Aline Bompas

The Influence of a 2D versus 3D Environment on Driver Learning Outcomes during a Vehicle Overtaking Task

Michael Batterley, Georg Meyer, Mark White

Investigating modifications to the brain's microstructure using Diffusion Kurtosis Imaging: An Examination of Visuomotor Training *Fahad AL Harshan*, Georg Meyer, Fiona Rowe, Sophie Wuerger, Abdulrahman Aloufi

Human saccadic exploration behavior in a 5-choice reversal learning task *Fred Hamker*, Oliver Maith, Wolfgang Einhäuser, Javier Baladron

Dimensional reinforcement expectancy in a stepwise multidimensional visual discrimination task by pigeons

Olga Vyazovska

Visual Aversive Learning Does Not Compromise Sensory Discrimination Marco Roccato, Andrea Pavan, Gianluca Campana, Maurizio Codispoti

Interface's visual cues in dyslexic users' procedural learning *Frol Sapronov*, Elena Gorbunova

Perceptual learning of a Form-from-Velocity Task *Elena von Perponcher*, Carla Reinalter, Lena Bock, Edith Benkowitsch, Mark Greenlee, Tina Plank

Perceptual learning increases perceived stimulus size at trained locations and improves untrained foveal performance

Chongyue He, Bao Nguyen, Yu Man Chan, Allison McKendrick

Contextual learning of multiple target locations in visual search: ERP evidence *Artyom Zinchenko*, Thomas Geyer, Xuelian Zang, Zhuanghua Shi, Hermann Müller, Markus Conci

Reading speed and neural dynamics related to word form recognition are modulated by the combination of multi-session tACS and reading training in Developmental Dyslexia *Chiara Turri*, Giuseppe Di Dona, Denisa Adina Zamfira, Francesco De Benedetto, Giada Alessi, Martina Battista, Daniela Perani, Luca Ronconi

Task-irrelevant phase but not contrast variability unlocks generalization in visual perceptual learning *Beyza Akkoyunlu*, Caspar Schwiedrzik

The COCO-Periph Dataset: Benchmarking and Training Deep Neural Networks Using Human Peripheral Vision

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

Distractor suppression operates in retinotopic coordinates Yayla Ilksoy, Dirk van Moorselaar, Benchi Wang, Jan Theeuwes

Generating candidate cognitive models for the Posner cueing task Laura Bartlett, Angelo Pirrone, Noman Javed, Peter Lane, Fernand Gobet Reading acceleration training combined with bilateral parietal tACS at beta frequency reduces regressive fixations and saccades in Developmental Dyslexia *Giuseppe Di Dona*, Denisa Adina Zamfira, Chiara Turri, Martina Battista, Giada Alessi, Daniela Perani, Luca Ronconi

Visual Working Memory Poster Session

Challenging the spatial modality of a digital Corsi task by manipulating spatial updating and mental rotation *Gregor Hardiess*

The effect of phasic and tonic alerting on visual perception Dawa Dupont, Signe Vangkilde, Anders Petersen

Do we use depth when selecting objects from visual working memory? *Babak Chawoush*, Freek van Ede

Effect of group homogeneity on ensemble bias visual working memory of individual representation. *Nithit Singtokum*, Sedthapong Chunamchai, Chaipat Chunharas

Beyond the magical number of seven: Subitizing does not reflect a pre-categorial process limited to 7 items but benefits from cardinal patterns way beyond this so-called magical frontier of iconic memory *Claus-Christian Carbon*, Malin Styrnal, Alexander "Sasha" Pastukhov

Are microsaccades biased similarly during external and internal shifts of covert attention? *Zampeta-Sofia Alexopoulou*, Baiwei Liu, Freek van Ede

Resting-state electroencephalographic change in response to combined tDCS and working memory training in healthy older adults *Sara Assecondi*, Lisa Moreel, Veronica Mazza

ACCURACY OF SPATIAL REPRESENTATIONS OF STATIC AND DYNAMIC SCENES IN WORKING MEMORY

Olga Saveleva, Galina Menshikova, Boris Velichkovsky, Grigory Bugriy

Does attention to internal visual content in working memory selectively affect distractor intrusions at memory-congruent locations? *Sisi Wang*, Freek van Ede

Investigating the temporal dynamics of top-down attention during single- versus dual-color search *Rebecca Rosa Schmid*, Bence Szaszkó, Ulrich Pomper, Ulrich Ansorge

Attentional template precision during preparation for visual search *Mikel Jimenez*, Dirk Kerzel, Martin Eimer, Anna Grubert

Visual Search and real-world object representations in aging *Alexandria Nicole Holcomb*, Chiara Francesca Tagliabue, Massimo Vescovi, Veronica Mazza

Prolonged Oculomotor Inhibition for increased Working Memory Load during Maintenance and Retrieval *Oren Kadosh*, Yoram S Bonneh

Distracted on Campus? The Influence of Distractions on Outdoor Visual Search and Memory *Sarah Jasmin Nachtnebel*, Alejandro Javier Cambronero-Delgadillo, Linda Helmers, Anja Ischebeck, Margit Höfler

Flipping the Switch in Attentional Control: Proactive Suppression and Capture Flexibly Guide Visual Attention Based on Search Goals *Marlene Forstinger*, Ulrich Ansorge

11:00 - 13:00 Talk Sessions 3: Face Perception & Illusions

Face Perception session Chair: Bruno Rossion Room: Aphrodite Hall

- 11:00 Maturation of face- and body-selective regions in fusiform cortex across childhood and adolescence *Elisabeth von dem Hagen*, OZGE GEZER, Erika Raven, Christoph Teufel, Isobel Ward
- 11:15 The eyes detect fearful faces before gaining visual awareness *Petra Vetter*, Sara Chergia, Marina Montandon, Junchao Hu, Stephanie Badde

- 11:30 Intracerebral electrical stimulation of the right FFA transiently impairs face identity recognition *Bruno Rossion*, Angélique Volfart, Xiaoqian Yan, Louis Maillard, Sophie Colnat, Jacques Jonas
- 11:45 Backward masking coarse-to-fine processing of faces in the human visual system. *Jolien P. Schuurmans*, Matthew A. Bennett, Mrittika Dey, Valérie Goffaux
- 12:00 Effective connectivity of the right fusiform face area through concurrent intracerebral electrical stimulation and frequency-tagged visual presentation *Luna Angelini*, Bruno Rossion, Angélique Volfart, Corentin Jacques, Louis Maillard, Sophie Colnat-Coulbois, Jacques Jonas
- 12:15 A robust neural index of automatic generalization across variable natural views of familiar face identities Justine David, Laurent Koessler, Bruno Rossion
- 12:30 Horizontal cues enable viewpoint tolerant recognition of human face identity *Alexia Roux-Sibilon*, Hélène Dumont, Vincent Bremhorst, Christianne Jacobs, Valérie Goffaux
- 12:45 Individual face fixation biases generalize to inanimate objects *Maximilian Broda*, Benjamin de Haas

Illusions session Chair: Paul Bays Room: Adonis

- 11:00 Evidence for Dissociable and Shared Mechanisms underlying motion-induced position shift illusions. *Timothy Cottier*, William turner, Alexander Holcombe, Hinze Hogendoorn
- 11:15 Is there a neural common factor for illusions? *Ayberk Ozkirli*, Maya A. Jastrzębowska, Aline Cretenoud, Bogdan Draganski, Michael H. Herzog
- 11:30 Inter-Individual Variability of Visual Illusions: Validity and Potential of Online Experiments as a Tool for Visual Illusion Study Kohske Takahashi, Yuta Ujiie, Zerui Dai
- 11:45 The size-weight illusion is explained by efficient coding based on correlated natural statistics *Paul Bays*
- 12:00 Painting, Architecture, Space Eye and body movements in VR disambiguate illusions. *Johannes Zanker*, Harriet O'Neill, Doga Gulhan
- 12:15 Measuring the "rocking line" illusion. *Ian M. Thornton*, Dejan Todorović
- 12:30 Sound frequencies modulate afterimage saturation *Tiziano Agostini*, Giulia Parovel, Marco Prenassi, Serena Cattaruzza, Walter Coppola
- 12:45 The honeycomb illusion: Peripheral vision of contours, unlike that of objects, is refractory to predictions, extrapolation and memory effects. *Marco Bertamini*, Giulio Contemori, Luca Battaglini, Carolina Maria Oletto
- 13:00 14:30 Lunch Break
- 14:30 16:00 Talk Sessions 4: Colour; Learning; Visual working memory

<u>Colour session</u> Chair: Galina V. Paramei Room: Aphrodite Hall

- 14:30 Deep reconciliation of categorical colour perception Arash Akbarinia
- 14:45 Swiping colors in virtual reality: How stable are color category borders? Avi M. Aizenman, Zoe R. Goll, Karl R. Gegenfurtner
- 15:00 Colour discrimination in COVID-19 survivors *Galina V. Paramei*, Yulia A. Griber
- 15:15 COLOUR MEMORY STRATEGIES IN DALTONISM Sunčica Zdravković, Neda Milić-Kerestes, Ivana Jakovljev

15:30 Adult and children colour selections for emotion terms: The importance of chroma and hue *Déborah Epicoco*, Domicele Jonauskaite, Marie-Lou Mailler, Christine Mohr

Learning Papers session Chair: Luca Ronconi Room: Adonis

- 14:30 Transfer of learning and causal reorganization of brain connectivity through rapid mental-map training *Lora Likova*, Zhangziyi Zhou, Michael Liang, Christopher Tyler
- 14:45 Extensive visual training in adulthood reduces an implicit neural marker of the face inversion effect *Simen Hagen*, Renaud Laguesse, Bruno Rossion
- 15:00 Glutamatergic processing in human pulvinar supports predictive structure learning *Cecilia Steinwurzel*, Ke Jia, Joseph J. Ziminski, Yuan Gao, Emir Uzay, Zoe Kourtzi
- 15:15 Spatial Cognition and Intervention-Induced Changes in White Matter Integrity: The Case of Dancers *Maria Ph. A. Photiou*, Sophia Vinci-Booher, Alexia Galati, Franco Pestilli, Marios Avraamides
- 15:30 Behavioral performance improvement in visuomotor learning correlates with functional and microstructural brain changes *Abdulrahman Aloufi*, Fiona Rowe, Georg Meyer
- 15:45 Combining multi-session tACS with reading acceleration training can ameliorate self-paced reading, oculomotor control, working memory and neural dynamics of motion perception in dyslexia *Luca Ronconi*, Denisa Zamfira, Chiara Turri, Giada Alessi, Martina Battista, Daniela Perani, Giuseppe Di Dona

<u>Visual Working memory Papers session</u> Chair: John Cass Room: Zeus

- 14:30 Contributions of retrospective attentional control to visual working memory performance: insights from the developing cognitive system Andria Shimi
- 14:45 Delayed selection of motor but not visual information with higher working memory load *Rose Nasrawi*, Mika Mautner-Rohde, Freek van Ede
- 15:00 Predictive Role of Individual Visual Working Memory Capacity in the Aesthetic Appreciation of Chinese Ink Paintings *Dingning Long*, Kang Zhang, Rongrong Chen
- 15:15 Measuring effects of cognitive load on visual capacity in virtual and augmented reality environments *John Cass*, Wing Hong Fu, Gabrielle Weidemann, Larissa Cahill
- 15:30 Top-down Attentional Capture by Affective Scenes Occurs Independent of Competing Visual Working Memory Load Chris Brown
- 15:45 Neural enhancement in vision Dario Gordillo, Janir Ramos da Cruz, Ophélie Favrod, Phillip R Johnston, Patrícia Figueiredo, Michael H Herzog
- 16:15 17:15 Coffee Break

16:15 - 17:15 Poster Sessions 4: Face Perception And Illusions

Illusions Poster Session

Resting-state neural correlates of visual Gestalt experience. *Marilena Wilding*, Anja Ischebeck, Natalia Zaretskaya

The BTPI: A battery measuring susceptibility to visual illusions *Yarden Mazuz*, Yoav Kessler, Tzvi Ganel

An Intuitive Physics Approach to the Water-Level Task using Augmented Reality *Romina Abadi*, Laurie M Wilcox, Robert S Allison

The shortened line segments illusion Saki Takao, Katsumi Watanabe, Patrick Cavanagh

The Helmholtz square is immune to changes in visual angle, aspect ratio, and pattern density *Christoph von Castell*, Heiko Hecht

Perisaccadic perception of continuous flicker: spatial and temporal aspects *Rytis Stanikunas*, Alvydas Soliunas, Remigijus Bliumas, Karolina Jocbalyte, Algirdas Novickovas

Does blurry vision affect the glare illusion? *Shiyuan Wu*, Satoru Torii, Yuya Kinzuka, Fumiaki Sato, Yuto Nakanishi, Tetsuto Minami, Shigeki Nakauchi

The illusory effects of makeup on the perceived eye slant are asymmetric *Kazunori Morikawa*, Hana Ogawa, Risa Sung

Revealing a hierarchy of prediction error signals using naturalistic video stimuli *Vincent Plikat*, Pablo Grassi, Julius Frack, Andreas Bartels

Effect of room aspect ratio on verticality perception bias *Kanon Fujimoto*, Hiroshi Ashida

Revised model for explaining apparent rotational motion of shape distortion illusions *Kenzo Sakurai*

Object Rigidity: Competition and cooperation between motion-energy and feature-tracking mechanisms and shape-based priors *Akihito Maruya*, Qasim Zaidi

Motion perception in illusory contexts Anna Riga, Dejan Todorovic, Ian M. Thornton

Concentric arcs illusion Kentaro Usui, Akiyoshi Kitaoka

Pitch-color associations under auditory illusion *Aurore Zelazny*, Thomas Alrik Sørensen

The influence of visual illusions on time-to-contact perception *Giulia Meneghini*, Giulio Contemori, Robin Baurès

Exploring the neurophysiological correlates of illusory self-motion (vection) *Polina Andrievskaia*, Behrang Keshavarz, Julia Spaniol, Stefan Berti

Seeing double... in time: single light pulses are seen as two separate flashes *Michele Deodato*, David Melcher

Face Perception Poster Session

Facial Expressions' Influence on Evaluation of Videoconference Recruitment Interviews *Susumu Shibui*, Kazumasa Mori, Nanami Sawada, Tomoko Oe, Taka-Mitsu Hashimoto

Human intracerebral recordings in the amygdala and fusiform gyrus during rapid periodic changes in facial expressions

Stéphanie Caharel, Jacques Jonas, Milena Dzhelyova, Stéphanie Matt, Louis Maillard, Bruno Rossion

Incongruence in disguise between encoding and retrieval impairs face identification *Charles C.-F. Or*, Kester Y.J. Ng, Yiik Chia, Jing Han Koh, Denise Y. Lim, Alan L.F. Lee

Do facial expressions affect the memory of facial color in an achromatic color adjustment task? *Yuya Hasegawa*, Hideki Tamura, Shigeki Nakauchi, Tetsuto Minami

The neural basis of Face Identity Recognition in macaques with fMRI frequency-tagging *Marie-Alphée Laurent*, Pauline Audurier, Jean-Baptiste Durand, Jacques Jonas, Bruno Rossion, Benoit R. Cottereau

Beauty in the Hijab – the influence of the religious garment and gaze direction on perceived facial attractiveness *Pik Ki Ho*, Hajar Aman Key Yekani, Mercedes Sheen

Encoding of multiple images in unfamiliar face recognition *Niamh Hunnisett*, Simone Favelle, Harold Hill

Breaking Through Ambiguity: Face-Likeness Reduces Breaking Time in Implicit Processing *Michael Makoto Martinsen*, Kairi Yoshino, Yuya Kinzuka, Fumiaki Sato, Tetsuto Minami, Shigeki Nakauchi

Do body gestures bias the perception of facial expressions? Nathali Lennon, Isabelle Mareschal, Steve M. J. Janssen, Ahamed Miflah Hussain Ismail

Concurrent selective neural indices for multiple high-level categories within a rapid image stream *Genevieve Quek*, Adélaïde de Heering

A Computational Study of Differential Importance of Facial Sub-Regions in Emotion Identification *Finn Radatz*, Angela Yu, Christine Lind

Concealed familiar face detection with EEG in rapid serial visual presentation *Ivory Chen*, Sebastiaan Mathôt, Robbert van der Mijn, Aytac Karabay, Howard Bowman, Elkan Akyurek

Spatial and temporal complexity modulates pareidolia in dynamic fractal noise *Lindsay Peterson*, Colin Clifford, Branka Spehar

Fixation patterns during and after face adaptation *Ronja Mueller*, Stephen Langton, Tilo Strobach, Claus-Christian Carbon, Peter Hancock

Is lateralization of face processing to the right hemisphere dependent on lateralization of word processing to the left hemisphere? *Christian Gerlach*

Facial colors modulate the recognition of anger in multiple faces *Eiji Kimura*, Yoko Mizokami

Effects of emotional Intelligence and emotional creativity on the perception of composite faces *Anna Pichugina*, Galina Menshikova

Refugee children's perception of facial emotional expression *Julia Michalek*, Matteo Lisi, Rana Dajani, Kristin Hadfield, Isabelle Mareschal

Coarse-to-Fine Integration in Human Face Identity Recognition *Mrittika Dey*, Jolien P. Schuurmans, Valérie Goffaux

Emotional faces break free faster than neutral faces and meaningless images of isoluminant visual stimuli

cecilia dapor, federica meconi, Irene Sperandio, daniela ruzzante, andrea bizzego

Spectral and color variations found in hyperspectral images of the skin of human faces. *Andreia Gomes*, Sérgio Nascimento, João Linhares

Age-related perceptual changes for gaze direction and portrait rotation caused by the Mona Lisa effect. *Marie Morita*, Shoji Itakura

Cues accounting for the horizontal tuning of human face identity recognition *Hélène Dumont*, Alexia Roux-Sibilon, Vincent Bremhorst, Eunice Tshibambe, Valerie Goffaux

Contributions of low-level mechanisms to (non)face-specialized contextual mechanisms *Mehmet Umut Canoluk*, Jolien P. Schuurmans, Matthew A. Bennett, Marius Grandjean, Pieter Moors, Valerie Goffaux

The psychophysics of facial age perception *Tzvi Ganel*, Melvyn Goodale

A hooligan game for isotropic looking gentlemen – Anisotropy values of facial photographs are related to success in Rugby World Cups Gregor Uwe Hayn-Leichsenring

Perception of symmetry of familiar and unfamiliar faces *Alexandra Kurenkova*, Elizaveta Luniakova, Victor Doubrovski

Face experience may modulate preference for mother's faces in infants raised during the COVID-19 pandemic in Japan *Megumi Kobayashi*, Machi Sugai, So Kanazawa, Masami K. Yamaguchi

Reading masked faces: updated narratives *Marina Pavlova*

Face pareidolia: impact of gender and cultural background *Alexander N. Sokolov*, Valentina Romagnano, Andreas J. Fallgatter, Marina A. Pavlova

Tuesday, 29 Aug

17:15 - 18:45 Rank Prize Lecture Room: Aphrodite Hall

Prof. David C. Burr

Università degli Studi di Firenze – UniFI

Talk title: Predictive perception: serial dependence, optimality and neural oscillations

19:00 - 22:00 Demo & Illusion Night Room: Aphrodite Gardens

Polaris & the Plough illusion *Kentaro Usui*, Akiyoshi Kitaoka

Flicker-induced Gradation Kohske Takahashi, Akiyoshi Kitaoka

Anti-Sensory Visual Illusion of Spinning Motion *Akihito Maruya*, Qasim Zaidi

Smooth and gradual extension of stereoscopic spatiality recorded by two drones *Martin Dokoupil*

The online Rocking Line Illusion *Ian M. Thornton*, Dejan Todorovic

You Through Me Kalliopi Ioumpa

Paradox Box Story (by Paradox Museum) Paradox Museum

Wednesday, 30 Aug

8:30 - 10:00 Symposia

Symposium 5: Time scales of visual processing: from neural dynamics to perception and cognition Chair: Arni Kristjansson & David Pascucci Room: Aphrodite Hall

- 8:30 Attentional guidance by learned associations *Joy Geng*
- 8:45 A role for visual cortex in the priming of attentional selection Jacob Westerberg
- 9:00 The effect of ongoing phase activity on visual perception Shen-Mou Hsu
- 9:15 Identifying and managing multiple time scales in perception *Pascal Mamassian*
- 9:30 How is probability represented over time? Arni Kristjansson

Symposium 6: Visual Word Recognition: Insights from Reading Deficits Chair: Heida Maria Sigurdardottir & Nuala Brady Room: Adonis

- 8:35 Word, face, and object recognition in posterior stroke: Patterns of performance and underlying lesions *Randi Starrfelt*
- 8:50 The role of visual shape processing in skilled reading *Alan C. Wong*
- 9:05 Dyslexia in Chinese word recognition What do its (dis-)similarities with face-recognition tell us? *Ricky Tso*
- 9:20 Disrupted neural mechanisms of high-level vision and their role in reading problems *Heida Maria Sigurdardottir*

10:00 - 11:00 Coffee Break

10:00 - 11:00 Poster Sessions 5: Time & Magnitude processing; Motion & Biological Motion; Consciousness

Time & Magnitude Processing Poster Session

Cognitive vs. visual responses to numeral representations of parity with EEG *Talia Retter*, Lucas Eraßmy, Christine Schiltz

Number selective sensorimotor channels derived from individual differences *Giovanni Anobile*, Irene Petrizzo, Roberto Arrighi, Daisy Paiardini, David Burr, Guido Marco Cicchini

The pupil reflects perceived numerosity after adaptation *Camilla Caponi*, Elisa Castaldi, David Burr, Paola Binda

Computational and empirical for time's subjective expansion in temporal oddball paradigm using recurrent neural network *Rakesh Sengupta*, Surampudi Bapiraju, Anindya Pattanayak

Do deviants in irrelevant sound sequence disrupt visually presented arithmetic task? Yu NAKAJIMA, Hiroshi Ashida

Investigating the neural correlates of numerosity adaptation through EEG single-trial decoding Giacomo Ranieri, David Burr, Roberto Arrighi, Paolo A Grasso

What is the minimum duration for grouping to occur? The example of crowding Martina Morea, Mauro Manassi, Michael Herzog

Can optical size manipulations improve time-to-contact estimation of accelerating vehicles? Elisabeth Maria Wögerbauer, Marlene Wessels, Heiko Hecht

Pre- and post-sensory effects on velocity judgements Tómas Kristjánsson, Hanna Rakel Th. Barker, Anna Rúnarsdóttir, Arni Kristjansson

Space & Time in Binocular Vision Marzoog Yassin, Maria Lev, Uri Polat

The Effect of Time Pressure on Visual Search Strategies in Dual Search Tasks Alejandro Javier Cambronero-Delgadillo, Sarah Jasmin Nachtnebel, Christof Körner, lain D. Gilchrist, Margit Höfler

Time estimation during motor activity Ottavia D'Agostino, Serena Castellotti, Maria Michela Del Viva

Trial-by-trial feedback fails to improve the consideration of acceleration in visual time-to-collision estimation Marlene Wessels, Heiko Hecht, Thirsa Huisman, Daniel Oberfeld

The role of perceptual novelty in the temporal oddball effect Akira Sarodo, Kentaro Yamamoto, Katsumi Watanabe

Perceptual processing speed depends on size, but not numerosity or objecthood Carolin Hübner

The influence of scene violations and attention on timing Ourania Tachmatzidou, Argiro Vatakis

The Role of Top-Down Attention in Shape from Shading Joshua Matthews, Luke Earnshaw, Debra Mills, Ayelet Sapir

Motion & Biological Motion Perception Poster Session

Voluntary eyelid movements facilitate perceptual alternation of bistable apparent motion Ryoya Sato, Eiji Kimura

Are you walking in my direction? Brain responses to different directions of motion - an fNIRS study with point-light walkers

Isabel C. Lisboa, Nelson Costa, Alfredo F. Pereira

The experience of attractiveness, health and youthfulness of the female body: Effects of femininity of body shape and gait Slobodan Markovic, Tara Bulut Allred

Neurodynamical model of dynamic bodily action recognition Prerana Kumar, Nick Taubert, Rajani Raman, Anna Bognár, Ghazal G. Nejad, Rufin Vogels, Martin A. Giese

Long-Duration Exposure to Microgravity Does Not Affect Perceived Travel Distance Ambika Bansal, Bjoern Joerges, Nils Bury, Meaghan McManus, Robert Allison, Michael Jenkin, Laurence Harris

The role of perceived naturalness and animacy in the visual pleasantness of a bouncing event Giulia Parovel, Marco Bertamini, Michele Vicovaro

Electrophysiological responses of the movement-related tactile gating in blindness Maria Casado-Palacios, Alessia Tonelli, Claudio Campus, Monica Gori

A new approach to the aperture problem in motion Alan Johnston

The effects of naturalistic backgrounds and movements on judgements of motion Hollie Carter, Julie Harris, Justin Ales

To what extent do attention and retinal location affect the optokinetic response? *Kirsten Williams*, Paul McGraw, Timothy Ledgeway, Denis Schluppeck

A hidden source of noise in techniques that yoke image motion to self-movement *Tom Freeman*, Joshua Haynes, Maria Gallagher, John Culling

Magnocellular and parvocellular aport contribution for selective and sustained attention *Victoria Geraldi Menegon*, Natália Máximo, Marcelo Costa

Perceived speed in the upper and lower visual fields *Hiroshi Ashida*, Kanon Fujimoto

Perception of dynamic stimuli: Toward a new methodology for scotoma patients *Ahmet Burak Kurt*, Alessia Tonelli, Nicola Domenici, Monica Gori

Bouncing ball tracking under different background settings can disentangle local and global motion processing

Andrew Isaac Meso, Antonia Massmann, Sara B Esmeraldo

High-speed motion informs object correspondence in the quartet motion paradigm *Melis Ince*, Carolin Hübner, Martin Rolfs

The role of Frontal Eye Field pursuit generation in the perception of depth from motion parallax Mark Nawrot, *Jeffrey Johnson*

Neural representations of observed interpersonal and person-object motion synchrony in the social perception network *Carl Bunce*, Maria Tsantani, Daniel Yon, Richard Cook

Influence of visual patterns and optical flow on inverted pendulum balancing tasks *Kai Streiling*, Loes van Dam

Reading acceleration training combined with multi-session parietal tACS enhances working memory and magnocellular-dorsal stream functionality in dyslexia *Denisa Adina Zamfira*, Chiara Turri, Giuseppe Di Dona, Martina Battista, Giada Alessi, Giulia Stefanelli, Daniela Perani, Luca Ronconi

Consiousness Poster Session

Task/Paradigm influence on CFS performance *Weina Zhu*, Haoxiang Liu, Jan Drewes

Metacognition of perceptual evidence accumulation in the first 50 milliseconds of viewing *Sascha Meyen*, Madeleine Soukup, Volker H. Franz

Signal detection measures can (!) distinguish perceptual biases from response biases *Marianne Broeker*, Paul Azzopardi

Transitions during binocular rivalry vary in appearance across stimulus types *Cemre Yilmaz*, Laura Pabel, Elias Kerschenbauer, Anja Ischebeck, Alexandra Sipatchin, Andreas Bartels, Natalia Zaretskaya

Disentangling the contribution of conscious and unconscious processes to breaking continuous flash suppression *Tommaso Ciorli*, Lorenzo Pia, Timo Stein

Masking by four dots revisited: The role of mask related attention *Josephine Reuther*, Uwe Mattler

Perception, Concept, Language - A new Approach to Connect Philosophy of Mind and Empirical Science Helene Gunhild Schaefermeyer, Dana Gudrun Rottleb, Gregor Uwe Hayn-Leichsenring

Successor representations of subliminal dots *Jasper de Waard*, Jan Theeuwes

Fair Masking Eliminates the Face Advantage in CFS Jan Drewes, Qunjie Huang, Weina Zhu

11:00 - 13:00 Talk Sessions 5: Multisensory; Oscillations & Cortical Processing

Multisensory Perception session Chair: Christopher Tyler Room: Aphrodite Hall

- 11:00 Short-term Neural Changes during Learning of Visual-Manual Gestures: An fMRI and DTI Study Sahal Alotaibi, Sophie Wuerger, Georg Meyer
- 11:15 Alpha-band audiovisual entrainment improves audiovisual temporal acuity *Gianluca Marsicano*, Caterina Bertini, Luca Ronconi
- 11:30 Context-dependency mechanisms in auditory distance estimation: the effect of blindness. *Alessia Tonelli*, Carlo Mazzola, Alessandra Sciutti, Monica Gori
- 11:45 Testing a Bayesian model of perceived visual and auditory speed during self-controlled head rotation *Joshua Haynes*, Maria Gallagher, John Culling, Tom Freeman
- 12:00 Examining the automaticity of sound-shape correspondences *Yi-Chuan Chen*, Pi-Chun Huang
- 12:15 tCFS: A new 'CFS tracking' paradigm reveals uniform suppression depth regardless of target complexity or salience *David Alais*, Jacob Coorey, Randolph Blake, Matthew Davidson
- 12:30 Modeling Depth Cue Combination Christopher Tyler

Oscillations & Cortical Processing Talk session Chair: Andrew Parker Room: Adonis

- 11:00 Alpha rhythms support coherent natural vision through feedback to early visual cortex *Lixiang Chen*, Radoslaw Martin Cichy, Daniel Kaiser
- 11:15 Pre-stimulus alpha speed dictates the precision of visual perception *Vincenzo Romei*, Claudia Poch, Luca Tarasi
- 11:30 The faster the better: alpha peak frequency is related to general visual performance *Maëlan Q. Menétrey*, Michael H. Herzog, David Pascucci
- 11:45 Predicting Binocular Rivalry Individual Differences from Resting MEG Aperiodic Alpha Janine Mendola, Eric Mokri, Jason Da Silva Castenheira
- 12:00 Contextual modulation of laminar BOLD profiles in V1 Joseph Emerson, Karen Navarro, Cheryl Olman
- 12:15 Discrete classes of neural activations for binocular disparity in human visual cortex *Andrew Parker*, Ivan Alvarez, Alessandro Mancari, Betina Ip, Holly Bridge
- 12:30 Perceptography: unveiling visual perceptual hallucinations induced by optogenetic stimulation of the inferior temporal cortex. *Elia Shahbazi*, Timothy Ma, Martin Pernus, Walter Scheirer, arash Afraz
- 12:45 White matter tracts connecting ventral and dorsal visual streams have distinct microstructural profiles and developmental trajectories *Zoha Arif*, Franco Pestilli, Sophia Vinci-Booher
- 13:00 14:30 Lunch Break
- 14:30 16:00 Talk Sessions 6: Time & Magnitude processing; Motion & Biological Motion; Serial Dependence

<u>Time & Magnitude processing session</u> Chair: Roberto Arrighi Room: Aphrodite Hall

14:30 Feature selective adaptation of numerosity perception *Roberto Arrighi*, Camilla Caponi, Paolo Grasso, Elisa Castaldi

- 14:45 The symmetry-induced numerosity underestimation is attention-dependent *Paula A. Maldonado Moscoso*, Giuseppe Maduli, Giovanni Anobile, Roberto Arrighi, Elisa Castaldi
- 15:00 Motor and visuomotor numerosity channels derived from individual differences *Irene Petrizzo*, Giovanni Anobile, Roberto Arrighi, Guido Marco Cicchini, Daisy Paiardini, David Burr
- 15:15 A Bayesian model for the estimation of the number of hidden objects *Alexander C. Schütz*, Hui Men
- 15:30 Temporal recalibration of sensorimotor contingencies of saccades can result from visual information alone *Wiebke Nörenberg*, Richard Schweitzer, Martin Rolfs
- 15:45 Temporal dissociation of localization and categorization tasks in Continuous Flash Suppression *Florian Kobylka*, Günter Meinhardt

Motion & Biological Motion session Chair: Eli Brenner Room: Adonis

- 14:30 Accelerating Visual Self-Motion is not Misperceived as Gravity when Judging Body Orientation on Earth or in Space Bjoern Joerges, Nils Bury, Meaghan McManus, Ambika Bansal, Robert Allison, Michael Jenkin, Laurence R. Harris
- 14:45 Tracking the dynamics of emerging neural representations via movement trajectories *Manuel Varlet*, Genevieve Quek, Tijl Grootswagers, Roger Koenig-Robert
- 15:00 How unconscious retinotopic motion processing affects non-retinotopic motion perception *Michael Herzog*, Marc Lauffs, Oh-Hyeon Choung, Haluk Ogmen
- 15:15 Can you learn not to respond to irrelevant motion while making fast arm movements? *Eli Brenner*, Lara M de Jonge, Niels JJ Tiems, Jeroen BJ Smeets, Emily Crowe
- 15:30 Spatiotemporal profile of flash mislocalization in the vicinity of motion *Mohammad Shams*, Peter Kohler, Patrick Cavanagh

Serial Dependence Papers session Chair: David Whitney Room: Zeus

- 14:30 Pre-saccadic alpha power is predictive of serial dependence in orientation judgement. *Chiara Terzo*, Giacomo Ranieri, Xinyu Xie, maria concetta morrone, David Burr
- 14:45 Serial dependencies for external and self-produced stimuli Sandra Tyralla, Clara Fritz, Eckart Zimmermann
- 15:00 Serial dependence in orientation perception in adults with autism spectrum disorder *Masaki Tsujita*, Naoko Inada, Ayako H. Saneyoshi, Tomoe Hayakawa, Shin-ichiro Kumagaya
- 15:15 Serial dependencies in visual stability during self-motion *Manuel Bayer*, Eckart Zimmermann
- 15:30 Serial dependence in dermatological judgments David Whitney, Zhihang Ren, Mauro Manassi, Xinyu Li
- 15:45 Explicit and Implicit Ensemble Perception: Same or Different Shaul Hochstein, Noam Khayat, Marina Pavlovskaya

16:15 - 17:15 Poster Sessions 6: Multisensory Perception; Oscillations & Cortical Processing

Multisensory Perception Poster Session

Psychological Effect of Color and Aroma of Olive Oil on Predicted Taste and Deliciousness *Akihisa Takemura*, Shino Okuda, Katsunori Okajima, Tsubasa Yamaguchi

Congruent sounds enhance the visual perception of actively masked biological stimuli *Stefano Ioannucci*, Petra Vetter

Visuo-haptic multisensory integration in actions toward oriented objects *Francesco Ceccarini*, Zoltan Derzsi, Robert Volcic

Cue Combination in Weight Perception with Familiar and Novel Cues Olaf Kristiansen, Meike Scheller, Marko Nardini

The eyes are captured by animate images without conscious visual perception *Junchao Hu*, Miriam Gfeller, Stephanie Badde, Petra Vetter

Image-to-audio generation as a tool for stress relief *Florin Girbacia*, Daniel Gheorghe Voinea

The effect of wearing a face mask on lip-reading and audiovisual speech perception. *Yuta Ujiie*, Kohske Takahashi

Dimension-based distractor handling in visual search: evidence from behavioral and electrophysiological measures

Shao-Yang Tsai, Jan Nasemann, Thomas Töllner, Hermann Müller, Zhuanghua Shi

Examining Auditory Modulations on Detecting and Integrating Visual Global Motion *Pi-Chun Huang*, Yi-Chuan Chen, Ang-Ke Ku

The role of visual and auditory information in the identification of the type of tennis serve: A pilot study *Fabrizio Sors*, Matteo Turci, Claudia Virginia Manara, Mauro Murgia, Tiziano Agostini

Internal and external triggers modulate ambient & focal processing of scenes and website pages *Thomas Le Bras*, Lou Farro, Lisa Formentini, Alexandre Milisavljevic, Benoit Allibe, Karine Doré-Mazars

Visual and haptic pleasantness of geometric patterns *Myrthe Plaisier*, Quinn van Rooy, Kynthia Chamilothori

Second-order spectral space : a common computational scheme underlying visual and auditory texture perception *Isamu Motoyoshi*, Hironori Maruyama, Kosuke Okada

Neutral grey judgements as a tool to reveal odour-colour correspondences Ryan Ward, Maliha Ashraf, Sophie Wuerger, Alan Marshall

Reduced contextual effects and sensory specialization in duration perception in autism *Inbar Avni Ben Zvi*, Bat Sheva Hadad, Hagit Hel Or

Pupillary measures of audio-visual binding can predict the varied severity of motion sickness *Revital Zilka*, Yoram Bonneh

Verbal or visual representation of side effects: Does this affect the judgement of driving behavior? *Lea Laasner Vogt*, Swen Jonas Kühne, Sabine Maja Bremermann-Reiser, Ester Reijnen

Bayesian multilevel modelling of simultaneity judgements discriminates between observer models and reveals how participants' strategy influences the window of subjective synchrony *Kielan Yarrow*, Joshua Solomon, Derek Arnold, Warrick Roseboom

Semantic interaction between music and artworks *Francesco De Benedetto*, Alice Mado Proverbio

Semantic Content Effects On The Perception Of Movieclips Anastasia Maria Kesoglou, Kyriaki Mikellidou

Spatial contextual cues can be used to guide interception *Emily M. Crowe*, Jeroen B. J. Smeets, Eli Brenner

Interaction between color and orientation in the perception of visual variance *Sachiyo Ueda*, Shuya HIrose, Reiko Yakushijin, Akira Ishiguchi

Oscillations & Cortical Processing Poster Session

Altered resting-state functional connectivity of the cortical central visual field representation in individuals with myopia

Natalia Zaretskaya, Marilena Wilding, Laura Posch-Pertl, Martin Weger, Christian Enzinger, Anja Ischebeck

Motion-induced SSVEPs without motion processing: large-scale cortical dynamics can interact with moving stimuli to produce SSVEPs *llker Duymaz*, Nihan Alp

Cortical initiation of spontaneous reversals of visual perception *Murat Can Mutlu*, Ehsan Kakaei, Jochen Braun

Entrainment of perceptually relevant brain oscillations in visual contour integration: Evidence from tACS and Audio-Visual Entrainment *Giulio Contemori*, Carolina Maria Oletto, Giuseppe Di Dona, Luca Ronconi, Luca Battaglini, Marco Bertamini

Predictive processing in the cortical network of biological motion perception *Murat Batu Tunca*, Burcu A. Urgen

Statistical learning of view-invariance and order-of-appearance revealed by cortical representation of synthetic objects *Ehsan Kakaei*, Jochen Braun

Anatomy of complex perceptual decision making processes in humans *Adam Koblinger*, József Arató, Jozsef Fiser

Neural activation in visual processing regions was related to improvement in the misestimation of body size

Yumi Hamamoto, Kentaro Honda, Ryo Ishibashi, Yi Ding, Rui Nouchi, Motoaki Sugiura

Imaginary scenes are represented in cortical alpha activity *Rico Stecher*, Daniel Kaiser

Abnormal networks connections to early visual cortex in posterior cortical atrophy *Atira Bick*, Ayelet McKyton, Haya Glick-Shames, Netaniel Rein, Netta Levin

Increased Gamma Oscillations are Associated with Visual Working Memory Load *Maria Lev*, Oren Kadosh, Ziv Siman Tov, Uri Polat

Neural correlates of visual discomfort: insights from magnetoencephalography (MEG) *Georgie Powell*, Petroc Sumner, Hannah Thomas, Alice Price, Lucie Reed, Gavin Perry, Krish Singh

Can we make the brain symmetry-blind? *Alexis Makin*, Ned Buckley, Emma Austin

Dissociating the role of visual field maps within the occipital place area *Catriona Scrivener*, Edward Silson

One in Four People Do Not Perceive Phosphenes During Transcranial Magnetic Stimulation on the Primary Visual Cortex *Phivos Phylactou*, Nikos Konstantinou

Population receptive field size in human V1, V2 and V3 varies as a function of cortical depth *Maya A. Jastrzębowska*, Nicolás Gravel, Polina lamschchinina, Daniel Haenelt, Nikolaus Weiskopf, Radoslaw M. Cichy

The effect of reduced temporal signal-to-noise ratio and participant motion on a population receptive field analysis

Elliot Howley, Susan Francis, Denis Schluppeck

Short-burst stimulation design enhances steady-state VEP responses *Jun Li*, Jing Chen, Matteo Valsecchi

Changes in Connective Field properties between primary and later visual areas during visual recognition *Mayra Bittencourt*, Marcus Daghlian, Marouska van Ommen, Remco Renken, Serge Dumoulin, Frans Cornelissen

Task-dependent switching of the tuning properties of F5 mirror neurons Lilei Peng, *Alexander Lappe*, Shengjun Wen, Martin Giese, Peter Thier

Alpha and theta rhythms support perceptual and attentional sampling in visual performance *Caterina Bertini*, Luca Ronconi, Gianluca Marsicano, Jessica Gallina

Is there an optimal stimulation rate for frequency-tagged visual word-selective responses? *Marion Marchive*, Bruno Rossion, Louis Maillard, Aliette Lochy

Ensemble perception: Disparities in processing across the visual processing hierarchy *Chien-Chun Yang*, Yi-Chuan Chen, Su-Ling Yeh

16:15 - 17:15 Coffee Break

17:30 - 22:00 Tour & Conference Dinner

Thursday, 31 Aug

8:30 - 10:00 Symposia

Symposium 7: The Interplay Between Vision and Action Chair: Joo-Hyun Song Room: Aphrodite Hall

- 8:30 Working memory load influences sensorimotor simulation during reading. *Laura E. Thomas*
- 8:50 Integrating Mental And Sensorimotor Workspaces Joo-Hyun Song
- 9:10 Beyond labeling THINGS-IN-3D: Is one visual hierarchy enough? Maryam Vaziri-Pashkam
- 9:30 Computational modelling of continuous reaching tasks reveals novel relationships between visual target selection and execution of reaching movements Dietmar Heinke

Symposium 8: Emergent categories of visual objects and scenes in infancy and deep neural networks: Brain constraints, learning, training, and language Chair: Liuba Papeo & Jean-Remy Hochmann Room: Adonis

- 8:30 Footprints of visual cortex organization in early object categorization *Céline Spriet*, Jean-Rémy Hochmann, Liuba Papeo
- 8:50 Multivariate assessment of visual category representations in the infant brain from EEG *Siying Xie*, Radoslaw Cichy
- 9:10 Using deep neural networks as a model for the development of human visual categories *Hans Op de Beeck*
- 9:30 Categorizing scenes based on gist emerges by 18 months *Maja Blesić*, Agnes Kovacs
- 10:00 11:00 Coffee Break
- 10:00 11:00 Poster Sessions 7: Object perception and Scene Perception; Emotion & Social Talk,; Art & Aesthetics

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

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

Al versus CG, Al 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

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

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

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

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

- 11:15 Achromatic Increment and Decrement Contrast Processing Differs Qualitatively *Rhea Eskew*, Yangyi Shi
- 11:30 Two kinds of top-down effects in an edge integration model of lightness *Michael Rudd*
- 11:45 Seeing in the dark: face recognition, reading and visual crowding under scotopic conditions Deena Elul, Ayelet McKyton, Netta Levin
- 12:00 Adaptation to invisible flicker induces spatial distance compression *Ljubica Jovanovic*, Paul McGraw, Neil Roach, Alan Johnston
- 12:15 Transfer of motor and CD gain adaptation in the vicinity of the adaptation target Jana Masselink, Markus Lappe
- 12:30 Posture aftereffects Does the visual system adapt to different representations of posture? *Eva Tzschaschel*, Kevin R. Brooks, Ian D. Stephen
- 12:45 Sensorimotor Adaptation while Navigating in Uncertain Virtual Environments Benedikt Kretzmeyer, Meaghan McManus, Constantin Rothkopf, Katja Fiehler

Real-world settings & VR Chair: Tamara Watson Room: Aphrodite Hall

- 11:00 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 Toward Automatic Detection of Gaze Events in Natural and Dynamic Viewing Ashkan Nejad, Gera de Haan, Joost Heutink, Frans Cornelissen
- 11:30 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 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 Investigating obstacle avoidance for real and pictorial obstacles *Martin Giesel*, Daniela Ruseva, Constanze Hesse
- 12:15 Head movements influence visual stability across gaze shifts *Eckart Zimmermann*, Manuel Bayer
- 12:30 Hemianopia, cycling and scanning behaviour in virtual and real environments *Eva Postuma*, Gera de Haan, Ashkan Nejad, Joost Heutink, Frans Cornelissen
- 12:45 Effect of saliency on gaze behaviour in VR Visual Search *Tamara Watson*, Niklas Stein, Markus Lappe, Szonya Durant
- 13:00 14:30 Lunch Break
- 14:30 16:00 Talk Sessions 8: Object perception; Emotion & Social

Object perception session Chair: Tijl Grootswagers Room: Aphrodite Hall

- 14:30 Using Al-generated synthetic images to drive object responses in the human brain *Tijl Grootswagers*, Genevieve Quek, Jessica Chin, Manuel Varlet
- 14:45 Human shape perception spontaneously discovers the biological origin of never-before-seen stimuli *Guido Maiello*, Kira Dehn, Frieder Hartmann, Yaniv Morgenstern, Sara Joy Hawkins, Thomas Offner, Joshua Walter, Thomas Hassenklöver, Ivan Manzini, Roland Fleming
- 15:00 The representation of diverse visual material properties in the human brain Hua-Chun Sun, Filipp Schmidt, Jacob Cheeseman, Alexandra Schmid, Martin Hebart, Roland Fleming

- 15:15 Interactive images for visual material communication *Maarten Wijntjes*, Aaron Kaltenmaier
- 15:30 Behavioral detectability of optogenetic stimulation of inferior temporal cortex varies with the visibility and size of concurrently viewed objects. *Rosa Lafer-Sousa*, Karen Wang, Reza Azadi, Simon Bohn, Emily Lopez, Arash Afraz

Emotion & Social Talk session Chair: Jelena Ristic Room: Adonis

- 14:30 Neural mechanisms of costly helping in the general population and mirror-pain synesthetes *Kalliopi loumpa*, Selene Gallo, Christian Keysers, Valeria Gazzola
- 14:45 The Influence of Hatha Yoga on Stress, Anxiety, and Suppression Bence Szaszkó, Rebecca Rosa Schmid, Ulrich Pomper, Mira Maiworm, Sophia Laiber, Hannah Tschenett, Urs Nater, Ulrich Ansorge
- 15:00 Neural dynamics supporting context-based social perception in health and disease *Lucia Amoruso*, Shuang Geng, Nicola Molinaro, Santiago Gil-Robles, Garazi Bermudez, Iñigo Pomposo, Ileana Quiñones, Manuel Carreiras
- 15:15 Social Perceptual Grouping is Sensitive to Group Size Jelena Ristic, Luowei Yan, Clara Colombatto
- 15:30 Integrative processing in artificial and biological vision predicts the perceived beauty of natural images Sanjeev Nara, Daniel Kaiser

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 Wuerger, 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 *Ângela 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. Jansonius THEORETICAL CONSEQUENCES OF THE MANIATIS 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

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 reafference 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

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 Room: Pantheon Ballroom A