

# PROGRAMME



Tuesday, 29 August 2023

## 8:30 - 10:00 Symposia

Room:	<b>Symposium 3: Crowding: beyond fixed mechanisms</b>	<b>Symposium 4: Color Geometry</b>	Room:
Aphrodite Hall	<i>Chair: Guido Marco Cicchini</i>	<i>Chair: Qasim Zaidi</i>	Adonis
8:30	Unlocking crowding: the impact of global configurations and ensemble statistics <i>David Pascucci</i>	Geometry of the neural representation of color <i>Bevil Conway</i>	
8:45	Crowding: an optimizing phenomenon? <i>Guido Marco Cicchini</i>	Neurometric colour space decoded from EEG signals. <i>Jasna Martinovic</i>	
9:00	Dissociating Representation from Access in Multilevel Crowding <i>Mauro Manassi</i>	Categorical Colour Geometry <i>Lewis Griffin</i>	
9:15	What drives the elevation of crowding in clinical disorders of vision? <i>John Greenwood</i>	Color geometry and neural geometry <i>Qasim Zaidi, Robert J. Ennis</i>	
9:30	An enhanced Bouma model fits fifty people's visual crowding <i>Denis Pelli</i>	The non-Riemannian nature of perceptual color space. <i>Roxana Bujack</i>	

## 10:00 - 11:00 Coffee Break

### 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*
- 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*

Tuesday, 29 August 2023

**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 Wuergler, 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 Benkowitzsch, 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*

Tuesday, 29 August 2023

## 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-categorical 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 Asseondi, 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 Szaszko, 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 Vecovi, 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*

Tuesday, 29 August 2023

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

Room:	Face Perception session	Illusions session	Room: Adonis
Aphrodite Hall	Chair: Bruno Rossion	Chair: Paul Bays	
11:00	<p>Maturation of face- and body-selective regions in fusiform cortex across childhood and adolescence <i>Elisabeth von dem Hagen, OZGE GEZER, Erika Raven, Christoph Teufel, Isobel Ward</i></p>	<p>Evidence for Dissociable and Shared Mechanisms underlying motion-induced position shift illusions. <i>Timothy Cottier, William Turner, Alexander Holcombe, Hinze Hogendoorn</i></p>	
11:15	<p>The eyes detect fearful faces before gaining visual awareness <i>Petra Vetter, Sara Chergia, Marina Montandon, Junchao Hu, Stephanie Badde</i></p>	<p>Is there a neural common factor for illusions? <i>Ayberk Ozkirlı, Maya A. Jastrzębowska, Aline Cretenoud, Bogdan Draganski, Michael H. Herzog</i></p>	
11:30	<p>Intracerebral electrical stimulation of the right FFA transiently impairs face identity recognition <i>Bruno Rossion, Angélique Volfart, Xiaolian Yan, Louis Maillard, Sophie Colnat, Jacques Jonas</i></p>	<p>Inter-Individual Variability of Visual Illusions: Validity and Potential of Online Experiments as a Tool for Visual Illusion Study <i>Kohske Takahashi, Yuta Ujiie, Zerui Dai</i></p>	
11:45	<p>Backward masking coarse-to-fine processing of faces in the human visual system. <i>Jolien P. Schuurmans, Matthew A. Bennett, Mrittika Dey, Valérie Goffaux</i></p>	<p>The size-weight illusion is explained by efficient coding based on correlated natural statistics <i>Paul Bays</i></p>	
12:00	<p>Effective connectivity of the right fusiform face area through concurrent intracerebral electrical stimulation and frequency-tagged visual presentation <i>Luna Angelini, Bruno Rossion, Angélique Volfart, Corentin Jacques, Louis Maillard, Sophie Colnat-Coulbois, Jacques Jonas</i></p>	<p>Painting, Architecture, Space – Eye and body movements in VR disambiguate illusions. <i>Johannes Zanker, Harriet O’Neill, Doga Gulhan</i></p>	
12:15	<p>A robust neural index of automatic generalization across variable natural views of familiar face identities <i>Justine David, Laurent Koessler, Bruno Rossion</i></p>	<p>Measuring the “rocking line” illusion. <i>Ian M. Thornton, Dejan Todorović</i></p>	
12:30	<p>Horizontal cues enable viewpoint tolerant recognition of human face identity <i>Alexia Roux-Sibilon, Hélène Dumont, Vincent Bremhorst, Christianne Jacobs, Valérie Goffaux</i></p>	<p>Sound frequencies modulate afterimage saturation <i>Tiziano Agostini, Giulia Parovel, Marco Prenassi, Serena Cattaruzza, Walter Coppola</i></p>	
12:45	<p>Individual face fixation biases generalize to inanimate objects <i>Maximilian Broda, Benjamin de Haas</i></p>	<p>The honeycomb illusion: Peripheral vision of contours, unlike that of objects, is refractory to predictions, extrapolation and memory effects. <i>Marco Bertamini, Giulio Contemori, Luca Battaglini, Carolina Maria Oletto</i></p>	

13:00 - 14:30

Lunch Break

# PROGRAMME



Tuesday, 29 August 2023

## 14:30 - 16:00 Talk Sessions 4: Colour; Learning; Visual working memory

Colour session		Room:	Learning Papers session		Room:	Visual Working memory		Room:
Chair: Galina V. Paramei		Aphrodite Hall	Chair: Luca Ronconi		Adonis	Papers session Chair: John Cass		Zeus
14:30	Deep reconciliation of categorical colour perception <i>Arash Akbarinia</i>		Transfer of learning and causal reorganization of brain connectivity through rapid mental-map training <i>Lora Likova, Zhangziyi Zhou, Michael Liang, Christopher Tyler</i>			Contributions of retrospective attentional control to visual working memory performance: insights from the developing cognitive system <i>Andria Shimi</i>		
14:45	Swiping colors in virtual reality: How stable are color category borders? <i>Avi M. Aizenman, Zoe R. Goll, Karl R. Gegenfurtner</i>		Extensive visual training in adulthood reduces an implicit neural marker of the face inversion effect <i>Simen Hagen, Renaud Laguesse, Bruno Rossion</i>			Delayed selection of motor but not visual information with higher working memory load <i>Rose Nasrawi, Mika Mautner-Rohde, Freek van Ede</i>		
15:00	Colour discrimination in COVID-19 survivors <i>Galina V. Paramei, Yulia A. Griber</i>		Glutamatergic processing in human pulvinar supports predictive structure learning <i>Cecilia Steinwurz, Ke Jia, Joseph J. Ziminski, Yuan Gao, Emir Uzay, Zoe Kourtzi</i>			Predictive Role of Individual Visual Working Memory Capacity in the Aesthetic Appreciation of Chinese Ink Paintings <i>Dingning Long, Kang Zhang, Rongrong Chen</i>		
15:15	Colour memory strategies in daltonism <i>Sunčica Zdravković, Neda Milić-Kerestes, Ivana Jakovljević</i>		Spatial Cognition and Intervention-Induced Changes in White Matter Integrity: The Case of Dancers <i>Maria Ph. A. Photiou, Sophia Vinci-Booher, Alexia Galati, Franco Pestilli, Marios Avraamides</i>			Measuring effects of cognitive load on visual capacity in virtual and augmented reality environments <i>John Cass, Wing Hong Fu, Gabrielle Weidemann, Larissa Cahill</i>		
15:30	Adult and children colour selections for emotion terms: The importance of chroma and hue <i>Déborah Epicoco, Domicela Jonauskaitė, Marie-Lou Mailler, Christine Mohr</i>		Behavioral performance improvement in visuomotor learning correlates with functional and microstructural brain changes <i>Abdulrahman Aloufi, Fiona Rowe, Georg Meyer</i>			Top-down Attentional Capture by Affective Scenes Occurs Independent of Competing Visual Working Memory Load <i>Chris Brown</i>		
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 <i>Luca Ronconi, Denisa Zamfira, Chiara Turri, Giada Alessi, Martina Battista, Daniela Perani, Giuseppe Di Dona</i>			Neural enhancement in vision <i>Dario Gordillo, Janir Ramos da Cruz, Ophélie Favrod, Phillip R Johnston, Patricia Figueiredo, Michael H Herzog</i>		

Tuesday, 29 August 2023

16:15 - 17:15 Coffee Break

**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*

Tuesday, 29 August 2023

## Face Perception Poster Session

Facial Expressions' Influence on Evaluation of Videoconference Recruitment Interview's

*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. Cottreau*

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 Mifflah 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 Mijl, 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*

Tuesday, 29 August 2023

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*

#### 17:15 - 18:45 Rank Prize Lecture

Room: **Prof. David C. Burr**  
Aphrodite Hall | Università degli Studi di Firenze – UniFI

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

#### 19:00 - 22:00 Demo & Illusion Night

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*