

# Perception Day 2023

## **Organizers**

Ben Harvey  
Chris Paffen  
Stefan van der Stigchel

## **Support**

Laura van Zantwijk

## **Abstract reviewers**

Teuni ten Brink  
Surya Gayet  
Marnix Naber  
Krista Overvliet  
Nathan van der Stoep  
Sjoerd Stuit



## **Welcome!**

We are happy to continue the tradition of Perception Day which started in 2006. After previous editions at TNO Soesterberg, Eindhoven University of Technology and Radboud University Nijmegen, it is now time for Utrecht University to welcome perception researchers active in the Netherlands and Flanders. As before, the goal is to bring together these researchers to acquire inspiration and exchange information across disciplines. We hope you enjoy the day!

The organizers



## Program overview

8:15	<b>Coffee</b>	Ruppert Hall
8:55	Welcome to Perception Day!	Ruppert Wit & Ruppert 040
9:00	<b>Talk session 1A:</b> patients & special populations	Ruppert Wit
9:00	<b>Talk session 1B:</b> attention & visual search	Ruppert 040
10:30	<b>Coffee break &amp; posters</b>	Ruppert Hall
11:15	<b>Talk session 2A:</b> audition, multisensory perception & timing	Ruppert Wit
11:15	<b>Talk session 2B:</b> attention & visual perception	Ruppert Rood
12:45	<b>Lunch</b>	Ruppert Hall
14:00	<b>Talk session 3A:</b> visual working memory	Ruppert Wit
14:00	<b>Talk session 3B:</b> action & pupillometry	Ruppert 040
15:15	<b>Coffee break &amp; posters</b>	Ruppert Hall
16:00	<b>Helmholtz lecture Paul Bays:</b> "computational principles of visual perception & memory"	Ruppert Wit
17:00	<b>Drinks</b>	Ruppert Hall



## Talks

Talk session 1A – patients & special populations

9:00 – 10:30, Room Ruppert Wit

9:00	Pupillometry As Index For Biases In Spatial Attention: Pseudoneglect In Healthy Controls, Useful Tool For Diagnosing Cerebral Visual Impairments?	Teuni ten Brink, Utrecht University
9:15	What Exactly Is So 'super' About Super-Recognisers?	Isabel Gillert, Heriot-Watt University
9:30	Quantifying Altered Visual Attention In Cerebral Visual Impairment Using An Eye Tracking Based Visual Search Task	Marinke Hokken, Erasmus MC Rotterdam
9:45	Disruption Of Multisensory Temporal Perception After Sport-Related Traumatic Brain Injury	Nathan van der Stoep, Utrecht University
10:00	Detecting And Reconstructing Visual Field Defects From Free-Viewing Eye Movements	Henning Schulte, University of Groningen
10:15	Long-Term Adaptation To A Visual Field Defect Improves Functional Vision: Evidence From A Continuous Visual Tracking Task	Minke de Boer, UMC Groningen

Talk session 1B – attention & visual search

9:00 – 10:30, Room Ruppert 040

9:00	Searching Near And Far: The Attentional Template Incorporates Viewing Distance	Surya Gayet, Utrecht University
9:15	A Serial Search Paradigm For Measuring Peripheral Crowding Strength	Dilce Tanriverdi, UMC Groningen
9:30	Don't Hide The Instruction Manual: A Dynamic Trade-Off Between Using Internal And External Templates During Visual Search	Alex Hoogerbrugge, Utrecht University
9:45	Pop-In Distractor Suppression During Visual Search In Cortical Area V4 Of The Monkey	Chris Klink, Netherlands Institute for Neuroscience
10:00	Pinging The Brain To Reveal A Hidden Attentional Priority Map	Dock Duncan, VU Amsterdam
10:15	The Costs Of Paying Overt And Covert Attention Assessed With Pupillometry	Damian Koevoet, Utrecht University

Talk session 2A – audition, multisensory perception & timing 11:15 – 12:45, Room Ruppert Wit

11:15	Spaced Vs Massed Learning In Auditory Statistical Learning	Jasper de Waard, VU Amsterdam
11:30	Highest Reaction Time Sensitivity To Sound Modulations At Supra-Threshold Levels	Nina Haukes, Radboud University Nijmegen
11:45	L2 Perception Training And Its Effects On Perception And Word Recognition In The Dutch Classroom	Marlisa Hommel, Utrecht University
12:00	The Effect Of Distance On Audiovisual Synchrony Perception In An Indoor Virtual Reality Environment	Victoria Korshunova-Fucci, Eindhoven University of Technology
12:15	Cortical Quantity Representations Of Visual Numerosity And Timing Overlap Increasingly But Remain Distinct	Evi Hendrikx, Utrecht University
12:30	Time Perception In A Large, Diverse And Naïve Sample Of Museum Visitors	Joost de Jong, University of Groningen

Talk session 2B – attention & visual perception  
11:15 – 12:45, Room Ruppert Rood

11:15	Reversal Of Dominance In Neural Competition By Top-Down Signals: Biased Competition Mechanisms Investigated By A Hybrid Neural Circuit	Naoki Kogo, Radboud University Nijmegen
11:30	What Did You Expect? Prediction Error Tuning In Sensory Cortex	David Richter, VU Amsterdam
11:45	Attentional Focus On Internal Representations Impairs Object Recognition Compared To External Focus Of Attention	Charlotte de Blecourt, Radboud University Nijmegen
12:00	Investigating Spatial Predictive Context In Visual Search With Rapid Invisible Frequency Tagging	Floortje Bouwkamp, Radboud University Nijmegen
12:15	Expected Distractor Context Biases The Attentional Template For Target Shapes	Maëlle Lerebourg, Radboud University Nijmegen
12:30	Redesigning Beach Safety Flags To Improve Intelligibility And Effectiveness	Fenne Roefs, VU Amsterdam

Talk session 3A – visual working memory, 14:00 – 15:15, Ruppert Wit

14:00	The Relationship Between Selective Attention And Working Memory Gating	Natalie Nielsen, Radboud University Nijmegen
14:15	Differential Feedforward And Feedback Signals For Central And Peripheral Working Memory Items	Guven Kandemir, VU Amsterdam
14:30	Action Consequences Guide Visual Working Memory Use	Andre Sahakian, Utrecht University
14:45	A Matter Of Availability: Neural Representations Of Task-Relevant Stimulus Features Are Sharper When Stimuli Are Memorized Rather Than Perceived	Samson Chota, Utrecht University
15:00	Hierarchical, Topographic, And Tuned Fronto-Parietal Responses To Visual Short-Term Memory Load	Ben Harvey, Utrecht University

Talk session 3B – action & pupillometry, 14:00 – 15:15, Ruppert 040

14:00	Are Hand Movements Influenced By Illusory Changes In The Identity Of The Goal?	Danai Vorgia, VU Amsterdam
14:15	Seeing Why A Target Is Accelerating Can Help One Intercept It	Eli Brenner, VU Amsterdam
14:30	Cerebrocerebellar Interactions Underlying Active Sensing	Vincenzo Romano, Erasmus MC, Rotterdam
14:45	Does Pupil Dilation Trigger A Shift From Rod-Dominated Vision To Cone-Dominated Vision?	Veera Ruuskanen, University of Groningen
15:00	Causal Effects Of Pupil Size On Visual Processing	Sebastiaan Mathôt, University of Groningen

## Posters

P1	Location And Image Prediction In Visual Sequence Learning	Ningkai Wang, VU Amsterdam
P2	Additivity Of Grouping By Proximity And Luminance Similarity: Individual Differences And Stability	Elisabeth van der Hulst, KU Leuven
P3	Changes In Connective Field Properties During Visual Recognition	Mayra Bittencourt, UMC Groningen
P4	Cortical Potentials Evoked By Tone Frequency Change As Objective Measure For Speech Perception	Huib Versnel, UMC Utrecht
P5	Eye State Influences Eigenvector Centrality Of Brain Networks In Resting-State Fmri	Theresa Marschall, UMC Groningen
P6	Withdrawn	Withdrawn
P7	Reduced Contextual Variability Facilitates Learned Attending Towards Task-Relevant Features And Away From Distracting Information	Chris Jungerius, University of Amsterdam
P8	Do We Use Kinesthetic Information To Decide Which Cookie To Take?	Gül Duygun, VU Amsterdam
P9	Action Similarity Modulates Visual Working Memory Similarity	Caterina Trentin, VU Amsterdam
P10	Auditory Pursuit Is Adaptive	Snandan Sharma, Radboud University Nijmegen
P11	An Apparent Motion Color Illusion	Rob van Lier, Radboud University Nijmegen
P12	Reaction Times Capture Temporal Interactions In Electrical Hearing	Ignacio Calderon De Palma, Radboudumc
P13	Does Crowding Predict Conjunction Search? An Individual Differences Approach	Ines Verissimo, VU Amsterdam
P14	Individual Differences In Statistical Learning For Speech Segmentation: Can We Predict Learning With Neural Oscillations And Rhythm Perception?	Iris van der Wulp, Utrecht University
P15	Reconstructing Pupillary Dynamics During Free-Viewing Of Movies: The Roles Of Pupil Light And Orienting Responses	Yuqing Cai, Utrecht University
P16	Adaptation To Numerosity Changes Monotonic Responses Of Early Visual Cortex	Liangyou Zhang, Utrecht University

P17	A Moment To Remember: Immediate Behavioural Interference Reduces Memory Performance In The Virtual Water Maze Task	Marie Pahlenkemper, Maastricht University
P18	Affective Touch Perception And Longing For Touch During The Covid-19 Pandemic	Larissa Meijer, Utrecht University
P19	Visual And Haptic Pleasantness Of Geometric Patterns	Myrthe Plaisier, Eindhoven University of Technology
P20	Eye-Tracking In Innovative Neuropsychological Assessment Of Visual Working Memory	Sanne Böing, Utrecht University
P21	Statistical Learning Facilitates The Selection Of Stimuli Into Awareness	Luzi Xu, Utrecht University
P22	Soft Robotics In Haptic Interaction	Irene Kuling, Eindhoven University of Technology
P23	Active Inference Slows Reversal Learning In Uncertain Environments	Jet Lageman, VU Amsterdam
P24	The Effects Of Eccentricity On Attentional Capture	Elle van Heusden, VU Amsterdam
P25	Involvement Of Superior Colliculus In Complex Figure Detection Of Mice	Alexander Heimel, Netherlands Institute for Neuroscience
P26	Timing Of Tonality And Progression: Anticipation-Related Arousal Speeds Up Subjective Time, Regardless Of Sequential Tonality	Hakan Karsilar, University of Groningen
P27	Teal & Orange	Andrea van Doorn, Utrecht University
P28	Perceptual grouping in haptic enumeration	Kirsta Overvliet, Utrecht University
P29	Objectively positive but subjectively unappealing: visual features of art evaluation	Sjoerd Stuit, Utrecht University
P30	Sound Appraisal Technology In The Real World	Tjeerd Andringa, SoundAppraisal
P31	What Can Visual-Field Deficits Teach Us About Audiovisual Integration?	Peter Bremen, Erasmus MC Rotterdam
P32	Concealed familiar face detection with oculomotor measures and EEG in rapid serial visual presentation	Ivory Chen, University of Groningen