

## **GRADIENTS OF** BRAIN ORGANIZATION

8:30 - 9:00

Registration & Coffee

9:00 - 9:15

Welcome

9:15 - 10:30

Multiscale Studies

Chairs: Konrad Wagstyl and Jessica Royer

Tools for multimodal, multiscale annotation of brain networks Justine Hansen, McGill University, Canada

Three transcriptional axes underpin anatomy, development, and disorders of the human cortex

Richard Dear, University of Cambridge, UK

Organization of laminar thickness covariance in the human cortex Amin Saberi, Max Planck Institute for Human Cognitive and Brain Sciences and Forschungszentrum Jülich, Germany

Panel discussion

10:30 - 10:45	Coffee break
10:45 - 12:00	Evolutionary perspectives Chairs: Sofie Valk and Ting Xu

Gradients and the search for human brain specializations Nicole Eichert, University of Oxford, UK

Intrinsic timescales as a unifying organizational principle of neural processing in nonhuman primates

Ana M. G. Manea, University of Minnesota, USA

Linking temporal lobe organization across modalities to individual differences in language processing Marius Braunsdorf, Donders Centre for Cognition, The Netherlands

Panel discussion

12:00 - 13:00	Lunch break
13:00 - 13:15	Flash Talks
	A shifting role of thalamocortical connectivity in the emergence of large- scale functional brain organization during early lifespan Shinwon Park, Sungkyunkwan University, South Korea
	Fine-Scaled Connectivity Gradients Improve Brain-Behavior Predictions Karl-Heinz Nenning, Nathan Kline Institute, USA
	Geometric Constraints on the Functional Organisation of the Infant Cerebral Cortex Alexander Holmes, Monash University, Australia
13:15 - 14:30	Dynamics Chairs: Seok-Jun Hong and Sara Larivière
	Neural state dynamics along the canonical gradients of functional brain organization reflect cognitive and attentional dynamics Hayoung Song, University of Chicago, USA
	Cortex-wide maturational changes in excitation-inhibition ratio Shaoshi Zhang, National University of Singapore, Singapore
	Gradients go to the movies: Macroscale cortical organization during naturalistic viewing  Tamara Vanderwal, University of British Columbia, Canada
	Panel discussion
14:30 - 14:45	Coffee break

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14:45 - 16:15	Cognitive and clinical perspectives Chairs: Daniel Margulies and Theodore Satterthwaite
	Why cognitive neuroscience needs a state space  Bronte Mckeown, Queen's University, Canada
	Cortical gradients in semantic cognition  Tirso Gonzalez-Alam, University of York, UK
	Atypical functional connectivity subspaces reflect declarative retrieval impairments in temporal lobe epilepsy  Donna Gift Cabalo, McGill University, Canada
	Microstructural and functional interactions in visual networks for perceptual learning  Liz Yuanxi Lee, University of Cambridge, UK

## Panel discussion

16:15 - 16:45	Closing comments
16:45 - 17:00	Transition
17:00 - 18:30	Poster session and cocktail