Saturday, June 22 2024 | 9 a.m. KST

GRADIENTS OF BRAIN ORGANIZATION

Location: Sungkyunkwan University, Natural Science Campus,
Semiconductor Building (330102), Suwon, Korea

8:30 - 9:00	Registration & Coffee

9:00 - 9:15	Welcome

9:15 - 10:45	Methods and multimodal applications Chairs: Sofie Valk and Jessica Royer

Integrated Effective Connectivity Reveals Sensory-Fugal Hierarchy in the Human Brain
Younghyun Oh, Sungkyunkwan University, Korea

Multiparametric mapping of superficial white matter architecture using 7T quantitative MRI
Youngeun Hwang and Raul Rodriguez-Cruces, McGill University, Canada

Biologically annotated brain connectomes
Vincent Bazinet, McGill University, Canada

Mapping White Matter Tracts to NeuroSynth Cognitive Functions
Joelle Bagautdinova, University of Pennsylvania, USA

Panel discussion

10:45 - 11:00	Coffee break

11:00 - 12:15	Gradients beyond the neocortex Chairs: Boris Bernhardt and Shinwon Park

Striatal connectivity gradients map onto cortico-striatal and dopaminergic projections across health and disease
Marianne Oldehinkel, Radboud University, Netherlands

Statistical mapping of cortico-subcortical gradients using geometric eigenmodes
Nikitas Koussis, University of Newcastle, Australia

Task-general connectivity model reveals variation in convergence of cortical input to cerebellum
Maedbh King, Massachusetts Institute of Technology, USA

Panel discussion

12:15 - 13:15	Lunch break
13:15 - 13:30	Flash Talks

TBD

TBD

TBD

13:30 - 14:45	Gradients and artificial intelligence Chairs: Bo-yong Park and Seok-Jun Hong

GAN-MAT: Generative Adversarial Network-based Microstructural Profile Covariance Analysis Toolbox
Yeong Jun Park, Sungkyunkwan University, Korea

Title TBD
Amin Saberi, Max Planck Institute for Human Cognitive and Brain Sciences, Germany

Title TBD
Mashbayar Tugsbayar, Mila - Quebec AI Institute, Canada

Panel discussion

14:45 - 15:00	Coffee break
15:00 - 16:15	Gradients for individual phenotyping Chairs: Daniel Margulies and Sara Larivière

Variability in sensory-association axis, evidence from sex- and individual-differences
Bianca Serio, Max Planck Institute for Human Cognitive and Brain Sciences, Germany

Using a neural state-space to understand cognition and behaviour
Samyogita Hardikar, Max Planck Institute for Human Cognitive and Brain Sciences, Germany

Motion Effects in Procrustes Aligned Individual-Level Gradients
Leonard Sasse, Institute of Neuroscience and Medicine, Brain and Behaviour (INM-7), Germany

Panel discussion

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

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