

Wednesday, 26th of September, 2018

07:30 AM - 08:30 AM Registration

08:30 AM Keynote Presentation

08:30 AM Pascal Fries

Ernst Strüngmann Institute (ESI) for Neuroscience in Cooperation with Max Planck Society, Germany

Rhythms for Cognition: Communication through Coherence

09:30 AM Brain Connectivity Probed with Non-Invasive Neurophysiology

09:30 AM Pedro A. Valdes-Sosa

Cuban Neurosciences Center, Cuba

Disentangling MEEG resting-state activity and connectivity

09:55 AM Christoph Michel

Universite de Geneve, Switzerland

Mapping of brain network dynamics at rest with EEG microstates

10:20 AM Viktor Jirsa

Institut de Neurosciences des Systemes, Inserm, Aix-Marseille Université, France

Translational Neuroscience: from neurons to large-scale networks and virtual brains

10:45 AM Coffee break

11:05 AM Modeling and Analysis: Brain Parcellation

11:05 AM David Van Essen

Washington University in St. Louis, United States

Functional organization of cerebral cortex in humans and nonhuman primates

11:30 AM Thomas Yeo

National University of Singapore, Singapore

Generative models for cortical parcellation and dynamics

11:55 AM James Haxby

Dartmouth College, United States

A Computational model of shared fine-scale structure in the human connectome networks

12:20 PM Lunch and poster session

2:00 PM Development of Brain Connectivity

2:00 PM Angela Laird

Florida International University, United States

The impact of science, technology, engineering, and mathematics (STEM) learning and anxiety on the default mode and salience

02:25 PM Tamara Vanderwal

Yale University, United States

Using movies to study the development of functional connectivity

02:50 PM Lucina Uddin

University of Miami, United States

Resting state BOLD signal variability and flexible behavior in typical and atypical development

03:15 PM Coffee break

3:35 PM Brain Connectivity in Neurological Conditions

03:35 PM Jean Gotman

Montreal Neurological Institute and Hospital, McGill University, Canada

Yes, focal epilepsy is a network, but does it matter?

04:00 PM Michael Fox

Harvard University Clinical and Translational Science Center (CTSC), United States

Using the human brain connectome to localize symptoms and guide treatment

04:25 PM Shi-Jiang Li

Medical College of Wisconsin, United States

Staging Alzheimer's disease: linking normal, preclinical, and prodromal to the onset of overt dementia

04:50 PM Silvina Horowitz

National Institute of National Disorders and Stroke, United States

Exploring Parkinson's Disease with non-linear dynamic functional connectivity

05:15 PM Alain Dagher
Montreal Neurological Institute and Hospital, McGill University, Canada
Brain networks as routes of propagation for neurodegeneration

05:40 PM – 08:00 PM Scientific Matching and Dating and Reception

Thursday, 27th of September, 2018

08:00 AM Mechanisms

08:00 AM David Kleinfeld
University of California, San Diego, United States
Neuronal entrainment of vasomotion as a basis of "resting state" connectivity

08:25 AM Xin Yu
Max Planck Institute for Biological Cybernetics, Germany
Decipher the neuro-glial-vascular contribution to the fMRI signal at varied brain states

08:50 AM Tim Murphy
University of British Columbia, Canada
Event triggered and resting state imaging of mesoscale functional connectivity in mouse brain

09:15 AM Keynote Presentation

09:15 AM Vince Calhoun
The Mind Research Network, United States
Spatio-temporal dynamics in fMRI and multimodal data: approaches and applications to brain health and disease

10:15 AM Coffee break

10:35 AM Estimating the Connectome

10:35 AM Anastasia Yendiki
Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, United State
Anatomically informed clustering of diffusion tractography data

11:00 AM Amir Shmuel
Montreal Neurological Institute and Hospital, McGill University, Canada
Identifying direct connections in an unknown, fine-scale, densely connected functional network

11:25 AM Bharat Biswal
New Jersey Institute of Technology, United States
Task Connectome

11:50 AM Dardo Tomasi
National Institutes of Health · National Institute of Alcohol Abuse and Alcoholism (NIAAA), United States
Task-free fMRI predicts task-related changes in brain activation, local functional connectivity density, and task performance

12:15 PM Lunch and poster session

01:55 PM Resting-State Dynamics

01:55 PM Catie Chang
National Institute of Mental Health, United States
Vigilance states and fMRI signal dynamics

02:20 PM Shella Keilholz
Emory University and Georgia Institute of Technology, United States
Quasiperiodic patterns of brain activity: origins and contributions to functional connectivity

02:45 PM Adeel Razi
University College London, United Kingdom
Dynamic Causal Modelling of the Resting Brain

03:10 PM Coffee break

03:30 PM Brain Connectivity in Autism and Psychiatric Conditions

03:30 PM Adriana Di Martino
New York University School of Medicine, United States
What can we learn from the autism connectome during sleep?

03:55 PM Amit Etkin
Stanford University, United States
A "Circuits First" Approach to Mental Illness

04:20 PM Susan Gabrieli
Massachusetts Institute of Technology, United States
Intrinsic Brain Architecture Predicts Future Psychopathology

04:45 PM Michelle Hampson
Yale School of Medicine, United States
Biomarkers of neurofeedback response

05:10 PM Rita Goldstein
Icahn School of Medicine at Mount Sinai, United States
Individual differences in resting-state connectivity pattern in cocaine addiction

05:45 PM – 06:45 PM

Buses leave from the conference venue to the Chalet Du Mont Royal, the venue of the gala dinner and the James Hyde Keynote presentation

07:00 PM Cocktail and music

07:45 PM The James Hyde Keynote Presentation

Alan Evans
Montreal Neurological Institute and Hospital, McGill University, Canada
Multimodal modelling of normal and abnormal brain connectivity

08:45 PM – 10:45 PM Dinner and music

10:00 PM – 11:00 PM

Buses leave from the Chalet Du Mont Royal to the main conference venue

Friday, 28th of September, 2018

08:00 AM Emerging Technologies

08:00 AM Irene Neuner

Uniklinik RWTH Aachen, Germany

Multimodal fingerprints of resting state derived from simultaneous MR-PET-EEG imaging

08:25 AM Anna Wang Roe

Zhejiang University, China

Laser-fMRI: A new method for studying the columnar connectome

08:50 AM Mechanisms

08:50 AM Jean Chen

The Rotman Research Institute, University of Toronto, Canada

Vascular contributions to resting-state fMRI: Why should you care?

09:15 AM Fahmeed Hyder

Relations between global brain metabolism and global fMRI signal

09:40 AM Karim Jerbi

Universite de Montreal, Canada

Unraveling the electrophysiological basis of the Default Mode Network: Combining insights from intracranial EEG and fMRI

10:05 AM Oral presentation of selected posters

10:30 AM Coffee break

10:50 AM Oral presentation of selected posters (continued)

11:40 AM Keynote Presentation

11:40 AM Peter Bandettini

National Institute of Mental Health, United States

Layer-specific fMRI: A new frontier mapping activity and connectivity

12:40 PM Lunch

01:30 PM Modeling and Analysis

01:30 PM Alex Fornito

Monash Institute of Medical Engineering, Australia

Mitigating noise in pre-processing of resting-state fMRI data

01:55 PM Stephen Strother

The Rotman Research Institute, University of Toronto, Canada

The impact of preprocessing choices on disease discrimination for resting state studies

02:20 PM Thomas Nichols

Oxford University, United Kingdom

Advances in Modelling and Ignoring Temporal Dependence in Resting State Time Series

02:45 PM Robert Cox

National Institute of Mental Health, United States

Cluster correction in FMRI analysis – a new multi-threshold approach

03:10 PM Coffee break

03:30 PM Analysis: Big Data and Machine Learning

03:30 PM Xi-Nian Zuo

Institute of Psychology, Chinese Academy of Sciences (IPCAS), China

Big Data for Reproducible Human Brain Mapping: Methodology, Resources and Standard

03:55 PM Xiaoping Hu

University of California, Riverside, United States

Individual Identification Based on rsfMRI using Recurrent Neural Network

04:20 PM Christian Beckmann

Radboud University, Netherlands

Charting the brain: big data analytics of resting-state connectomes for precision neuroscience

