SIXTH BIENNIAL CONFERENCE ON
RESTING-STATE AND
BRAIN CONNECTIVITY

September 24-29, 2018

September 24-25
Educational Workshop

September 26-28
Main Conference

September 29
Satellite Workshop on Machine
and Deep Learning

www.restingstate.com

CONFERENCE BOOKLET

Montreal, Quebec, Canada
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Introduction and Venues

Sixth Biennial conference on Resting State and Brain Connectivity

Presented by the International Society for Brain Connectivity and hosted by the Montreal Neurological Institute and Hospital and McGill University.

The conference themes include methods and applications of structural or functional brain connectivity, including studies of mechanisms, developing methods of data acquisition, modeling, analysis, network science, machine learning and deep learning, and applications in the fields of cognitive neuroscience, neurological diseases and psychiatric conditions.

Venues

Sept. 24-25  Educational Workshop  Montreal Neurological Institute, 3801 University St.
Sept. 26-28  Main Conference  Center Mont-Royal, 2200 Mansfield St.
Sept. 27  Gala Dinner  Chalet Mt Royal, 1196 Voie Camillin-Houde
Sept. 29  Machine Learning Workshop  Montreal Neurological Institute, 3801 University St.
CONFERENCE CHAIR
Amir Shmuel
McConnell Brain Imaging Centre
Montreal Neurological Institute
McGill University, Montreal, QC, Canada

LOCAL ORGANIZING COMMITTEE
Amanpreet Badhwar
Université de Montréal
Alain Dagher
Montreal Neurological Institute, McGill University
Julien Doyon
Montreal Neurological Institute, McGill University
Alan Evans
Montreal Neurological Institute, McGill University
Bratislav Misic
Montreal Neurological Institute, McGill University
Deborah Rashcovsky
Conference Manager, Montreal Neurological Institute, McGill University

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Mark Lowe
Cleveland, OH, USA
Christopher Pawela
Medical College of Wisconsin, WI, USA
Martin Walter
University of Tuebingen, Germany
Susan Whitfield Gabrieli
MIT, USA
Christian Windischberger
Medical University of Vienna, Austria

CONFERENCE ORGANIZATION
Montreal Neurological Institute’s Event Management Team
Conference website: www.restingstate.com, managed by Marc-André Meloche from the Neuro

ABSTRACT COMMITTEE
Amir Shmuel (Chair)
Montreal Neurological Institute, McGill University
Amanpreet Badhwar
Université de Montréal
Boris Bernhardt
Montreal Neurological Institute, McGill University
Bharat Biswal
New Jersey Institute of Technology
Gang Chen
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Montreal Neurological Institute, McGill University
Nathan Spreng
Montreal Neurological Institute, McGill University
Paule-J Toussaint
Montreal Neurological Institute, McGill University
Susan Whitfield - Gabrieli
MIT
Christian Windischberger
Medical University of Vienna
Yashar Zeighami
Montreal Neurological Institute, McGill University
Welcome Note of the Conference Chair

DEAR COLLEAGUES,

I am delighted to welcome you to the Sixth Biennial Conference on Resting State and Brain Connectivity. This year, the conference is hosted by the Montreal Neurological Institute and Hospital (the MNI or the Neuro). The MNI/Neuro was established in 1934 by the world-renowned neurosurgeon and visionary leader in neuroscience, Dr. Wilder Penfield. It is currently directed by Dr. Guy Rouleau, a leading expert in the genetics of neurological diseases.

Since its inception in 2008, the conference has grown steadily. We are excited to welcome over 450 attendees in the main conference. There will be 300 posters presented on methods and applications of structural or functional brain connectivity, including studies using healthy subjects, patients, or animal models. The invited talks and the posters cover a wide scope of topics, including methods of data acquisition, modeling, analysis, network science, machine learning and deep learning. There will be lectures and posters about mechanisms underlying brain imaging, cognitive neuroscience and development, neurological diseases and psychiatric diseases. The presented studies have used a wide range of data types, including resting-state, task state, continuous task (e.g. movies), fMRI, diffusion MRI, MEG, EEG, fNIRS, brain stimulation and invasive measurements.

We are excited to welcome the largest ever number of attendees – over 250 – to the educational course, organized by Dr. Bharat Biswal and myself. This clearly indicates that our field continues to grow. Given the clear importance of machine learning and the emerging deep learning modeling method to studies of brain connectivity, we present a very well attended (over 100 attendees) satellite workshop on ‘A practical guide on how to incorporate machine and deep learning into your data analysis’.

Inspired by the tradition of collaborative atmosphere and interactive environment in the conference, we have initiated the ‘Scientific matching and dating’ program, which aims to facilitate networking and communication between the conference speakers and attendees. I am confident that you’d be happy to offer advice on themes of your expertise. I invite you to initiate communications and request advice on your research.

We have gathered an outstanding team of speakers. I encourage you to ask them challenging questions during the discussions, as this will benefit the attendees and the speakers, stimulate new ideas, and advance our field.

Led by Dr. Aman Badhwar, we have assembled one of the largest NeuroSci-Art exhibits ever, which I encourage you to visit. Information about the schedule of visiting the exhibit will be presented at the conference.

We are grateful to our sponsors, including Siemens Healthineers, McGill University’s Healthy Brains for Healthy Lives program, The Quebec Bio-Imaging Network, The Montreal Neurological Institute and Hospital, McGill University’s Faculty of Medicine, Roxon, Bruker, Brain Products and Brain Vision. You will find their exhibition booths within the space devoted to poster presentations.

A big thank you to the members of the international organizing committee for the long and productive discussions on the program, and for their advice on the conference organization. Many thanks go to the local organizing committee and abstract reviewers. Last but not least, thanks go to The Neuro’s event management team and web-programmer, for their immense contributions to the organization of the conference.

I wish everyone an excellent experience,

Amir Shmuel
Conference Chair
Resting-State and Brain Connectivity 2018
Montreal Neurological Institute, McGill University
LECTURES
The lectures are presented in the symposia theater of the Centre Mont Royal, on the first floor. The presentations need to be uploaded onto a PC laptop located at the audio-visual console of the symposia theater. Please prepare your presentation for the allotted amount of time. Chairs and moderators may interrupt should you overrun your time limit.
Speaking time is assigned as follows:
1. Keynote 48 minutes + 7 minutes for discussion.
2. Lectures 19 minutes + 5 minutes for discussion.

POSTERS
The poster sessions are scheduled for September 26 and 27, and are held in the foyer of the third floor of the Centre Mont Royal. Posters will be reviewed by reviewers during the sessions. Fifteen posters will be selected for oral presentations on September 28.
There will be five awards of $500 CAD each given to the authors of posters with the highest rankings.
All posters will be posted before 8 AM on the day of presentation.
Posters presented on September 26 will be removed by 8 PM the same day. Posters presented on September 27 can remain posted until the end of the day, September 28.
In both posters sessions – on September 26 and September 27 – presenters of posters with index ‘A’ or ‘C’ will stand by their posters during 12:40 PM – 1:20 PM or a longer duration. Presenters of posters with index including ‘B’ or ‘D’ will stand by their posters during 1:20 PM – 2:00 PM or a longer duration.

INDUSTRIAL EXHIBITION
We are happy to host representative of our sponsors. The exhibitors are looking forward to welcoming you to present their comprehensive range of innovative products. The exhibitions are in the foyer of the third floor third of the Centre Mont Royal.

SCI-ART EXHIBIT
The Sci-Art exhibit is in the foyer of the fourth floor of the Centre Mont Royal. The schedule of the exhibit will be announced during the conference.

SCIENTIFIC MATCHING AND DATING
This program aims to facilitate communications between attendees, especially between trainees and expert faculty / staff members. All attendees are encouraged to sign up on the conference web-site, advise, and be advised.

RECEPTION
The reception is scheduled for 6 PM on September 26, and is held in the foyer of the third floor of the Centre Mont Royal.

WIRELESS INTERNET
All attendees will receive the information on accessing the wireless internet as part of their registration material.

BADGE
Please be sure to wear your badge for all conference sessions and events.

SMOKING POLICY
The City of Montreal bans smoking and use of electronic cigarettes in public spaces.
Program

Wednesday, September 26, 2018

07:30 AM - 08:15 AM  Registration, coffee and tea

8:15 AM
Opening remarks
Amir Shmuel
McGill University, Canada
Chair of the conference

8:20 AM  Keynote Presentation
Session Chair
Randy McIntosh, Rotman Research Institute – Baycrest, University of Toronto, Canada

8:20 AM  Pascal Fries
Ernst Strüngmann Institute (ESI) for Neuroscience in Cooperation with Max Planck Society, Germany
Rhythms for cognition: communication through coherence

9:15 AM  Brain Connectivity Probed with Non-Invasive Neurophysiology

9:15 AM  Pedro A. Valdes-Sosa
Cuban Neurosciences Center, Cuba
Disentangling MEEG resting-state activity and connectivity

9:40 AM  Christoph Michel
Universite de Geneve, Switzerland
Mapping of brain network dynamics at rest with EEG microstates

10:05 AM  Viktor Jirsa
Institut de Neurosciences des Systemes, Inserm, Aix-Marseille Université, France
Translational neuroscience: from neurons to large-scale networks and virtual brains

10:30 AM  Coffee break

10:55 AM  Modeling and Analysis: Brain Parcellation
Session Chairs
Bharat Biswal, New Jersey Institute of Technology, NJ, USA
Pierre Bellec, University of Montreal, Canada

10:55 AM  David Van Essen
Washington University in St. Louis, United States
Functional connectivity analyses in humans and nonhuman primates
11:20 AM  Thomas Yeo  
National University of Singapore, Singapore  
*Individual-specific network-level and areal-level cortical parcellations*

11:45 AM  James Haxby  
Dartmouth College, United States  
*A common model of shared fine-scale information in the human connectome*

12:10 PM  Xi-Nian Zuo  
Institute of Psychology, Chinese Academy of Sciences (IPCAS), China  
*Analyses of repeated resting-state fMRI data*

12:35 PM  Lunch and poster session

**2:35 PM  Development of Brain Connectivity**  
**Session Chair** 
Julien Doyon, Director of the McConnell Brain Imaging Center, MNI, McGill University, Canada

2:35 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*

3:00 PM  Lucina Uddin  
University of Miami, United States  
*Resting state BOLD signal variability and flexible behavior in typical and atypical development*

3:25 PM  Coffee break

**3:45 PM  Brain Connectivity in Neurological Conditions**  
**Session Chairs** 
Martin Walter, University of Tuebingen, Germany  
Mark Lowe, Cleveland Clinic, United State

3:45 PM  Jean Gotman  
Montreal Neurological Institute and Hospital, McGill University, Canada  
*Yes, focal epilepsy is a network, but does it matter?*

4:10 PM  Michael Fox  
Harvard University Clinical and Translational Science Center (CTSC), United States  
*Using the human brain connectome to localize symptoms and guide treatment*
Program, Thursday, September 27, 2018

4:35 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

5:00 PM  Silvina Horovitz
National Institute of National Disorders and Stroke, United States
Exploring Parkinson’s Disease with non-linear dynamic functional connectivity

5:25 PM  Alain Dagher
Montreal Neurological Institute and Hospital, McGill University, Canada
Brain networks as routes of propagation for neurodegeneration

6:00 PM – 08:00 PM  Reception and Scientific Matching and Dating

Thursday, September 27, 2018

07:30 AM - 08:00 AM  Registration

8:00 AM  Mechanisms
Session Chairs
Yen-Yu Ian Shih, University of North Carolina, United State
Chris Pawela, Medical College of Wisconsin, United States

8:00 AM  David Kleinfeld
University of California, San Diego, United States
Neuronal entrainment of vasomotion as a basis of “resting state” connectivity

8:25 AM  Xin Yu
Max Planck Institute for Biological Cybernetics, Germany
Astrocytes, a key mediator or an Indirect effector, for brain-state dependent neurovascular coupling

8:50 AM  Tim Murphy
University of British Columbia, Canada
Event triggered and resting state imaging of mesoscale functional connectivity in mouse brain

9:15 AM  Keynote Presentation
Session Chair
Stephen Strother, Rotman Research Institute – Baycrest, University of Toronto, Canada
9:15 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*

10:10 AM  Coffee break

**10:30 AM  Estimating the Connectome**
Session Chair  
Todd Constable, Yale University, United State

10:30 AM  Anastasia Yendiki  
Martinos Center for Biomedical Imaging, Massachusetts General Hospital, Harvard Medical School, United State  
*Anatomically informed clustering of diffusion tractography data*

10:55 AM  Amir Shmuel  
Montreal Neurological Institute and Hospital, McGill University, Canada  
*Identifying direct connections in an unknown, fine-scale, densely connected functional network*

11:20 AM  Bharat Biswal  
New Jersey Institute of Technology, United States  
*Task Connectome*

11:45 AM  Dardo Tomasi  
National Institute 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*

12:10 PM  Lunch and poster session

**2:10 PM  Resting-State Dynamics**
Session Chairs  
Rasmus Birn, University of Wisconsin, United States  
Georgios Mitsis, McGill University, Canada

2:10 PM  Catie Chang  
National Institute of Mental Health, United States  
*Vigilance states and fMRI signal dynamics*
Program, Thursday, September 27, 2018

2:35 PM    Shella Keilholz
Emory University and Georgia Institute of Technology, United States
*Quasiperiodic patterns of brain activity: origins and contributions to functional connectivity*

3:00 PM    Adeel Razi
Monash University, Australia
*Dynamic Causal Modelling of the Resting Brain*

3:25 PM    Coffee break

3:45 PM    Brain Connectivity in Development and Autism
Session Chair
Susan Whitfield-Gabrieli, Massachusetts Institute of Technology, United States

3:45 PM    Tamara Vanderwal
Yale University, United States
*Movies as an acquisition state for developmental neuroimaging*

4:10 PM    Adriana Di Martino
New York University School of Medicine, United States
*What can we learn from the autism connectome during sleep?*

4:35 PM    Brain Connectivity in Psychiatric Conditions
Session Chair
Kelvin Lim, University of Minnesota, United States

4:35 PM    Amit Etkin
Stanford University, United States
*A “circuits first” approach to mental illness*

5:00 PM    Michelle Hampson
Yale School of Medicine, United States
*Biomarkers of neurofeedback response*

5:25 PM    Rita Goldstein
Icahn School of Medicine at Mount Sinai, United States
*Whole-brain resting state connectivity in cocaine addiction*

6:00 PM – 7:00 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
7:00 PM    Cocktail and music

7:45 PM    The James Hyde Keynote Presentation
Introduction of the James Hyde Keynote Speaker
Amir Shmuel, McGill University, Canada

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

8:35 PM – 10:50 PM    Dinner and music

10:00 PM – 11:00 PM
Buses are available to leave from the Chalet Du Mont Royal to the main conference venue

Friday, September 28, 2018

8:00 AM    Emerging Technologies
Session Chair
Ravi Menon, Robarts Institute, Western University, Canada

8:00 AM    Irene Neuner
Uniklinik RWTH Aachen, Germany
Multimodal fingerprints of resting state derived from simultaneous MR-PET-EEG imaging

8:25 AM    Anna Wang Roe
Zhejiang University, China
Laser-fMRI: A new method for studying the columnar connectome

8:50 AM    Mechanisms
Session Chair
Kamil Uludag, Maastricht University, The Netherlands

8:50 AM    Jean Chen
The Rotman Research Institute, University of Toronto, Canada
Vascular contributions to resting-state fMRI: Why should you care?
Program, Friday, September 28, 2018

9:15 AM  Fahmeed Hyder
Yale University School of Medicine, United States
Relations between global brain metabolism and global fMRI signal

9:40 AM  Karim Jerbi
Universite de Montreal, Canada
The electrophysiological basis of the default mode network: new insights from intracranial depth recordings in humans

10:05 AM  Oral presentation of selected posters
Session Chair
Christian Windischberger, Medical University of Vienna, Austria

10:30 AM  Coffee break

10:50 AM  Oral presentation of selected posters (continued)
Session Chair
Klaus Schefller, Max-Planck Institute and Tuebingen University, Germany

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

12:35 PM  Lunch

1:35 PM  Modeling and Analysis
Session Chairs
Xiaoping Hu, University of California Riverside, United States
Christian Beckmann, Radboud University, Netherlands

1:35 PM  Alex Fornito
Monash Institute of Medical Engineering, Australia
Mitigating noise in pre-processing of resting-state fMRI data

2:00 PM  Stephen Strother
The Rotman Research Institute, University of Toronto, Canada
The impact of preprocessing choices on disease discrimination for resting state studies
2:00 PM        Stephen Strother
The Rotman Research Institute, University of Toronto, Canada
*The impact of preprocessing choices on disease discrimination for resting state studies*

2:25 PM        Thomas Nichols
Oxford University, United Kingdom
*Advances in modelling and ignoring temporal dependence in resting state time series*

2:50 PM        Robert Cox
National Institute of Mental Health, United States
*Cluster correction in fMRI analysis – a new multi-threshold approach*

3:15 PM        Coffee break

3:35 PM        **Modeling and Analysis: Big Data and Machine Learning**
Session Chair
Jean Baptiste Poline, McGill University, Canada

3:35 PM        Susan Whitfield-Gabrieli, Massachusetts Institute of Technology, United States
*Intrinsic brain architecture predicts future psychopathology*

4:00 PM        Xiaoping Hu
University of California, Riverside, United States
*Application of machine learning to understanding resting state fMRI data*

4:25 PM        Christian Beckmann
Radboud University, Netherlands
*Charting the brain: big data analytics of resting-state connectopies for precision neuroscience*

4:50 PM        **Announcements and Closing**
Announcement of the 5 winners of the poster competition
Announcement of the Resting State and Brain Connectivity 2020
Posters

All posters will be posted before 8 AM on the day of presentation. Posters presented on September 26 will be removed by 8 PM the same day. Posters presented on September 27 can remain posted until the end of the day, September 28.

In both posters sessions – on September 26 and September 27 – presenters of posters with index ‘A’ or ‘C’ will stand by their posters during 12:40 PM – 1:20 PM or a longer duration. Presenters of posters with index including ‘B’ or ‘D’ will stand by their posters during 1:20 PM – 2:00 PM or a longer duration.

**Wednesday, September 26th 12:00 - 2:00 pm**

**Mechanisms**

<table>
<thead>
<tr>
<th>Board No.</th>
<th>Authors and Title</th>
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</table>
| 1-A       | Ramina Adam, Kevin Johnston, Ravi S. Menon, Stefan Everling  
Resting-state functional reorganization during recovery of the saccade choice bias following an experimental prefrontal cortex stroke in macaque monkeys |
| 1-B       | O Bibollet-Bahena, S Ho-Tran, A Rojewski, S Bélanger and C Casanova  
Network connectivity in the visual system of mice reared in an enriched environment |
| 1-C       | Felipe Aedo-Jury & Albrecht Stroh  
Distinct brain dynamics under persistent and slow wave brain state in rats revealed by functional connectivity analyses |
| 1-D       | Saloni Sharma, Prosper Aghesi Fiave, Sona Khaneh Shenas, Dante Mantini, Koen Nelissen  
A comparison of macaque monkey posterior and anterior insular functional networks using task-related and resting-state fMRI |
| 2-A       | M. Oldehinkel, A. Llera, M. Faber, A.F. Marquand, R.C. Helmich, K.V. Haak, C.F. Beckmann  
Investigating dopamine-specific projections in the human striatum with resting-state fMRI |
Consciousness in human subjects and primates is supported by temporally evolving brain processes |
| 2-C       | Zilu Ma, Yuncong Ma, Nanyin Zhang  
Development of brain-wide connectivity architecture in awake rats |
| 2-D       | Wenyu Tu, Zilu Ma, Yuncong Ma, David Chau, Nanyin Zhang  
Impact of inactivating a hub node on the whole-brain network organization |
| 3-A       | Nelson Cortes, Bruno Oliveira, Christian Casanova  
Cortical dynamics are mediated by the pulvinar |
| 3-B       | Daniel Gutierrez-Barragan, Albert Basson, Stefano Panzeri, Alessandro Gozzi  
Brain-wide mapping of fMRI network dynamics in the mouse brain |
| 3-C       | E.C. Caparelli, T.J. Ross, H. Gu and Y. Yang  
The effects of smoothing and scan duration on functional connectivity of the Amygdala using high-resolution resting-state fMRI |
| 3-D       | Xingya Cai, Haoran Xu, Peichao Li, Han C, Heng Ma, Jiaming Hu, Yang Fang, Chen Fang, Kun Yan, Haidong D. Lu  
Spontaneous functional maps observed in monkey visual areas with intrinsic signal optical imaging |
| 4-A       | Jai Puneet Singh, Md Taufig Nasseef, Lola Welsch, Weiya Ma, Emmanuel Darcq, Brigitte Lina Kieffer  
Mouse fMRI analysis of morphine effects on whole brain activity: functional connectivity signature under two different anaesthetics |
**Modeling and analysis**

4-B  **Jason S. Nomi, Taylor Bolt, Aaron S. Heller & Lucina Q. Uddin**  
Test-Retest Reliability of Resting-State BOLD Signal Variability Measures

4-C  **Mario Gilberto Báez-Yáñez, Philbert S. Tsai, David Kleinfeld and Klaus Scheffler**  
Vascular point spread function in real cortical vessel networks

4-D  **Antonis D. Savva, Georgios D. Mitis and George K. Matsopoulos**  
Evaluation of Metrics for Assessing Dynamic Functional Connectivity Using the Sliding Window Method

5-A  **Murat Demirtas, Joshua B. Burt, Markus Helmer, Jie Lisa Ji, Brendan Adkinson, Matthew F. Glasser,  
David C. Van Essen, Stamatios N. Sotiropoulos, Alan Anticevic, John D. Murray**  
Hierarchical Heterogeneity Across Human Cortex Shapes Large-Scale Neural Dynamics

5-B  **Makoto Fukushima & Olaf Sporns**  
Fluctuations in global network topology of resting-state functional connectivity: comparison of modeled and empirical data

5-C  **G. Lohmann, J. Stelzer, and K. Scheffler**  
Bipartite connectivity mapping (BCM)

5-D  **Kâmil Uludağ, Martin Havlicek**  
On the importance of fMRI signal models when estimating effective connectivity

6-A  **Niko Huotari, Lauri Raitamaa, Vesa Korhonen, Heta Helakari, Viola Borchartd, Vesa Kiviniemi**  
An examination of the effects of changing sampling rate in fMRI analytics

6-B  **Ionescu TM, Amend M, Haifiz R, Wehrl HF, Pichler BJ and Biswal BB**  
Dynamic [18F]FDG PET acquired simultaneously to fMRI provides complementary resting-state connectivity information on a metabolic scale

6-C  **Ionescu TM, Amend M, Haifiz R, Wehrl HF, Biswal BB and Pichler BJ**  
Evaluation of molecular-level resting-state connectivity based on dynamic serotonin transporter ([11C]DASB) PET acquired simultaneously to fMRI

6-D  **Rodrigo H. Avaria, Nelson Trujillo-Barreto, Wael El-Deredy**  
Hierarchical Dirichlet Process Hidden Markov Model for estimating switching dynamics in Resting State EEG

7-A  **Yali Huang, Peiguang Wang, Johnh C. Gore, and Zhaohua Ding**  
Detection of Functional Activation in White Matter Based-on Voxel-wise Frequency Analysis

7-B  **Muwei Li, Zhaohua Ding, John C. Gore**  
Characterization of hemodynamic responses in brain white matter using event-related functional tasks

7-C  **Samy Castro, Wael El-Deredy, Demian Battaglia, and Patricio Orio**  
Connectivity structures drive multistability of global brain activity

7-D  **Tetiana Gorbach, Anders Lundquist, Xavier de Luna, Alireza Salami, Lars Nyberg**  
A hierarchical Bayesian mixture modeling for analysis of resting-state functional brain connectivity

8-A  **Jonathan Wirsich, Enrico Amico, Benjamin Morillon, Katia Lehongre, Jean-Philippe Ranjева, Maxime Guye, Anne-Lise Giraud, Joaquin Goñi, Sepideh Sadaghiani**  
Bimodal functional connectome traits of fused concurrent EEG-fMRI

8-B  **Laura E. Suarez, Greg Kiar, Andrew Doyle, Alan Evans, Bratislav Mišić**  
Reverse Engineering the Human Connectome - Learning Function from Structure

8-C  **Xiaoli Huang & Xu Lei**  
The Global Signal of Resting-state EEG

8-D  **Lauri Raitamaa, Viola Borchartd, Niko Huotari, Vesa Korhonen, Heta Helakari, and Vesa Kiviniemi**  
The effect of breath-hold on cardiac pulsation amplitude in brain stem and spread of cardiac pulse in the brain
9-A  **Haleh Falakshahi, Victor M. Vergara, Sergey Plis, Vince D. Calhoun**
Capturing Blocked Paths and Missing Edges in a Meta-modal Framework

9-B  **M. A. Kayvarnad, S. C. Strother, J. J. Chen**
Challenging assumptions regarding physiological correction: a comparison of rs-fMRI denoising techniques

9-C  **M. A. Kayvarnad, S. C. Strother, J. J. Chen**
The contribution of low-frequency and physiological-noise power to functional connectivity: a comparison of rs-fMRI denoising techniques

9-D  **Soroosh Afyouni, Stephen Smith & Thomas E. Nichols**
Effect of Regional Autocorrelation on Resting-state Functional Connectivity Inference

10-A  **Yuncong Ma, Zhifeng Liang, Thomas Neuberger, Nanyin Zhang**
Neural Components underlying Global Signal

10-B  **Patricio Orio, Marilyn Gatica, Carlos Coronel, Rubén Herzog, Kesheng Xu, Samy Castro, Jean P Maidana**
Chaos versus Noise as Drivers of Dynamic Functional Connectivity in Neural Networks

10-C  **Casseb RF, Sojoudi A, Barton AS, Goodyear BG**
HiDyConn Toolbox: updates and application

10-D  **Tetsuo Kobayashi, Kazuki Ida, Shibo Okuhata, Ryosuke Nakai, Naoya Furuhashi, Koma Suzuki**
Automatic white matter analysis to evaluate local disruptions along nerve fiber tracts towards identification of neural circuits associated with neuropsychiatric disorders

11-A  **Ahmad Hussein, Jacob Matthews, Tomas Paus, Zdenka Pausova, Catriona Syme, Bradley Macintosh, J. Jean Chen**
Blood flow and other contributions to the global signal: a story of inequality and consequences

11-B  **Pierre LeVan, Matthias Dümpe1mann, Yulia Novitskaya, Armin Brandt, Andreas Schulze-Bonhage, Jürgen Hennig**
The relationship between structural connectivity, dynamic functional connectivity, and electrophysiologically measured effective connectivity

11-C  **Nigel Colenbier, Russell Poldrack, Lucina Novitskaya, Thomas Calhoun, Daniele Marinazzo**
Resting state BOLD signal fluctuations and arterial stiffness: Are they related?

11-D  **Frederik Van de Steen, Hannes Almgren, Adeel Razi, Karl Friston, Daniele Marinazzo**
Dynamic causal modelling of fluctuating connectivity in resting-state EEG

12-A  **Yameng Gu, Xiao Liu**
Arousal-related fMRI modulations mediate the effect of the motion-based scrubbing on resting-state function connectivity

12-B  **Narges Moradi, Mehdy Douty, Roberto C Sotero**
Empirical mode decomposition based global signal regression for resting-state functional connectivity MRI

**Machine or deep learning**

12-C  **Lina Abou-Abbas, Scott Huberty, James DesJardins, Alan Evans, Mayada Elsabagh, and the BASIS Team**
Optimization and comparison of different machine learning algorithms to predict risk and diagnostic outcomes

12-D  **Behnaz Yousefi, Jacob C.W. Billings, Shella D. Keilholz**
Multiple Quasi-Periodic Patterns of intrinsic brain activity and their contribution to functional connectivity

13-A  **Sadia Shakil, Sarah Faber, Andrea R Mc Culloch, Tanya M Brown, Kelly Shen, Anthony R McIntosh**
Relationship of EEG and music features through low dimensional manifolds
13-B Violaine Verrecchia, Philippe Boutinaud, Pierre Yves Hervé, Marc Joliot
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*David Araya, Wael El-Deredy, Nelson Trujillo-Barreto*

Inference of brain state duration using Hidden Semi Markov Model

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*Jingyuan E. Chen, Jonathan R. Polimeni, Gary H. Glover*

On the statistical characteristics and benefits of rapidly-sampled fMRI data

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Evaluation of parcellation of the cerebral cortex based on gradient mapping of cortical thickness and myelin estimates in non-human primates

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*Scott Peltier, Eric Ichesco, Lynne Pauer, Daniel J. Clauw, Richard Harris*

Support vector machine prediction of clinical pain response using resting-state fMRI
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13-D  **Ju-Hyeon Lee, Hyun-Chul Kim, Jong-Hwan Lee**  Personal identification of resting-state dynamic functional connectivity patterns using deep neural network

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Precuneus dysconnectivity in the DMN of schizophrenia patients correlated with apathy, evidence from resting state fMRI.

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