

Computation, Dysfunction, and the Brain
Workshop at the Computational Neuroscience meeting in Prague, July 23
Organizers: Rowshanak Hashemiyoony & Christoph Michel

Agenda

Each talk lasts 40 minutes and 10 minutes discussion

I. Structure and Dynamics of Brain Networks

- 9:00 – 9:10** **Welcome address and Introduction**
- 9:10 – 10:00** ***Viktor Jirsa, Aix-Marseille University, Marseille***
Functional connectivity dynamics in large-scale brain networks
- 10:00-10:30** **Coffee Break**
- 10:30 – 11:20** ***Christoph Michel, University of Geneva, Geneva***
Temporal dynamics of neuronal networks and aberrations in neurological and psychiatric disorders
- 11:20 – 12:10** ***Marc Goodfellow, University of Exeter, Exeter***
The importance of network structure in seizure initiation
- 12:10 – 13:30** **Lunch**

II. Neurophysiology and Modulation of Brain Networks

- 13:30 – 14:20** ***Anthony Grace, University of Pittsburgh, Pittsburgh***
The circuit dynamics of dopamine system regulation and its disruption in psychiatric disorders
- 14:20 – 15:10** ***Giacomo Koch, Foundation Santa Lucia, Rome***
Neuromodulation of cortico-cortical circuits with TMS: From basic neurophysiology to clinical application
- 15:10 – 15:40** **Coffee Break**

III. Effects of Therapeutic Strategies on Brain Networks

- 15:40 – 16:30** ***Rowshanak Hashemiyoony, University Hospital of Cologne, Cologne***
Effects of DBS on circuit dynamics in movement and neuropsychiatric disorders
- 16:30 – 17:20** ***Günter Schiepek, Paracelsus Medical University, Salzburg***
Discontinuous patterns of brain activation during psychotherapy
- 17:20 – 17:30** **General Discussion**