

International SFB 936 – euSNN Symposium

“Role of neural oscillations in the healthy and diseased brain”

March 1st, 2023, 09:00-17:00 h

Erika-Haus, UKE Campus

PROGRAM

Regular talks 30 min + 15 min discussion, Controversy 30 min + 30 min + 25 min discussion

| | Topic | Speaker |
|-------|--|-------------------|
| 09:00 | Opening | |
| 09:05 | <i>Pro</i> - Oscillations cause behavior <u>Title:</u> Visuo-saccadic coordination by alpha oscillations during visual exploration and reading | Ole Jensen |
| 09:35 | <i>Contra</i> - Oscillations are an epiphenomenon <u>Title:</u> Solving the binding problem: assemblies form when neurons enhance their firing rate – they don't need to oscillate or synchronize | Pieter Roelfsema |
| 10:05 | Discussion with the audience | |
| 10:30 | Break | |
| 11:00 | Altered oscillations in disease 1 <u>Title:</u> Gamma-band oscillations in schizophrenia: mechanisms, biomarkers and the search for novel treatments | Peter Uhlhaas |
| 11:45 | Altered oscillations in disease 2 <u>Title:</u> Adaptive DBS – are we ready for clinical application? | Andrea Kühn |
| 12:30 | Lunch break | |
| 13:30 | Altered oscillations in disease 3 <u>Title:</u> Low-frequency oscillations in motor control and motor stroke | Marlene Bönstrup |
| 14:15 | Optogenetic studies on oscillations <u>Title:</u> Oscillatory patterns and spatio-temporal dynamics in the mouse prefrontal cortex | Katharina Heining |
| 15:00 | Break | |
| 15:30 | Scale-bridging models of oscillations <u>Title:</u> Using computational models to infer neural circuit parameters and information processing functions from LFP and EEG oscillation spectra | Stefano Panzeri |
| 16:15 | Modeling of network dynamics <u>Title:</u> Turbulent dynamics based analysis of brain in health and disease | Gustavo Deco |
| 17:00 | End | |