

Minisymposium 10

Modellierung und Analyse neuraler Netzwerke zum Verständnis sensorischer Reizverarbeitungsstörungen

Tassilo Küpper (Köln)

In the first part of this minisymposium results obtained through the project SSensory disorders of irritant processing appearing at schizophrenia - Mathematical modelling of neuronal networks based on time-frequency-analysis and analysis of EEG β sponsored by the Walter and Marga Boll foundation will be presented: The second part is devoted to neural aspects of networks, specially a system modelling motions of an insect leg and results describing effects of plasticity in a neural model.

Ann-Katrin Becher	Phase Synchronization in a network of inhibitory and excitatory coupled oscillators	171
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Dienstag, 20. September**Seminargebäude, S25**

- 14:00 Tassilo Küpper (Köln)
Begrüßung
- 14:15 Svitlana Popovych (Köln)
Mathematical modelling of dysfunction of the thalamo-cortical loops in schizophrenia
- 14:40 Ann-Katrin Becher (Köln)
Phase Synchronization in a network of inhibitory and excitatory coupled oscillators
- 15:10 Sevda Çağırıcı (Köln)
Amplitude Dynamics in the Model of Two Nonlinear Coupled Oscillators
- 15:30 Ralf Müller (Köln)
Modelling coupled network oscillations to study structures in real electroencephalogram (EEG) data as part of a multifaceted approach for the detection of psychiatric diseases
- 16:00h – 16:30h Pause**
- 16:15 Silvia Daun–Gruhn (Köln)
A model of the levator-depressor neuro-mechanical system of the stick insect leg
- 17:15 Veera Katharina Menz (Göttingen)
Modelling of Synaptic STDP and Analysis in a Two-Neuron Model