

NeuroBridges

The Max Planck Campus, Göttingen, Germany, July 29-31 2014

All talks will take place at seminar room 0.79 of the Max Planck Institute for Dynamics and Self Organization.

Tuesday 29.7.14

14:00-14:15 Opening words – Tim Gollisch (University of Göttingen), Yonatan Loewenstein (Hebrew University) and Ahmed El Hady (MPI, Göttingen)

14:15-15:00 Opening talk Erwin Neher (MPI, Göttingen) : *“Short-term plasticity at the Calyx of Held Synapse”*

15:00-15:35 Asaf Gal (Technion and Hebrew University): *“Dynamics, variability and self-organization of single neuron excitability”*

15:35-16:00 Coffee break

16:00-16:35 Hazem Toutounji (University of Osnabrück): *“The Geometry of representations and computations in an excitable and plastic brain”*.

16:35-17:10 Igor Kagan (Primate Center Göttingen): *“Bihemispheric mechanisms of spatial decision-making in human and non human primates”*

17:10-17:35 Coffee break

17:35-18:10 Adham Elshahabi (University of Tübingen): *“Functional brain networks in epilepsy”*

18:10-18:45 Najib Majaj (New York University): *“Simple learned weighted sums of inferior temporal firing rates accurately predict human object recognition performance”*.

20:00- dinner + discuss

Wednesday 30.7.14

9:00-9:35 Marcel Oberländer (MPI, Tübingen): *“Reverse engineering sensory perception and decision making: bridging physiology, anatomy and behavior”*

9:35-10:10 Uri Yanover (Hebrew University): *“Reward gradient approximation via covariance -based synaptic plasticity”*

10:10-10:45 Mostafa Nashaat (Charité Universitätsmedizin)

10:45-11:10 Coffee break

11:10-11:45 Ziad Hafed (University of Tübingen): *“Active vision at the microscopic level: relating fixational eye movements to behavioral and neural measures of visual processing”*

11:45-12:20 Andreas Schaefer (MRC, London): *“Inhibition, Rhythms and Olfaction”*

12:30-14:00 lunch break

14:00-14:35 Ben Engelhard (Hebrew University): *“Probing cortical dynamics by operant conditioning of neuronal activity”*.

14:35-15:10 Naama Brenner (Technion): *“Synaptic Size dynamics as an effective stochastic process”*

15:10-15:35 Coffee break

15:35-16:10 Karim Oweiss (Michigan State University): *“Clinically viable brain machine interfaces”*.

16:10-17:35 Fred Wolf (MPI, Göttingen): *“Predicting the dynamics and architecture of receptive fields in the visual cortex”*

18:00-20:00 tour

Thursday 31.7.14

9:00-9:35 Mouna Maroon (University of Haifa): *"The effects of stress on extinction and medial prefrontal cortex plasticity in the post-weanling and adult animals"*.

9:35-10:10 Aiman Saab (University of Zurich): *"Impact of Glial Glutamate Receptors in Brain Function and Energy Metabolism"*

10:10-10:40 Coffee break

10:40-11:15 Henning Sprekeler (Humboldt-Universität zu Berlin / University of Cambridge): *"Receptive field formation in self-balancing networks"*

11:15-11:50 Inbal Goshen (Hebrew University): *"Illuminating Memory: An optogenetic approach to study the role of neurons and glia in memory acquisition and recall"*.

11:50-12:30 concluding remarks and discussion

12:30-13:30 Lunch and farewell