

Concluding Symposium

How tools and models resolve the neuronal networks in the mammalian brain: six years of collaborative research

Thursday,
June 6th

Session 1 **Chair: Andreas Kreiter**

9:00-9:30 **Ileana Hanganu-Opatz**
Welcome and introduction of the SPP 1665

9:30-10:15 **Andreas Draguhn** – *University Heidelberg, Germany*
Neuronal ensembles - cellular mechanisms underlying coordinated neuronal activity in the hippocampus and entorhinal cortex

10:15-10:40 **Troika Hanganu-Opatz, Hegemann, Oertner, Denker**
Ileana Hanganu-Opatz
Resolving developing networks in health and disease

10:40-11:05 **Troika Holthoff, Kirmse, Hübner, Kiebel**
Knut Kirmse
Developmental functions of depolarizing GABAergic transmission

11:05-11h25 **Coffee break**

11:25-11:50 **Troika Hahn, Kelsch, Durstewitz, Bähner**
Florian Bähner
Behavioral strategies guide rule learning in rats: novel behavioral mechanisms & associated prefrontal dynamics

11:50-12:15 **Troika Roeper, Duvarci, Sigurdsson, Schneider**
Sevil Duvarci
Dopamine function in working memory networks and its dysfunction in a mouse model of schizophrenia

12:15-13:00 **Patrick Ruther** – *Albert-Ludwigs-University Freiburg, Germany*
Innovative MEMS-based tools for optogenetics and electrophysiology

13.00-14:00 **Lunch break**

Session 2 **Chair: Frank Ohl**

14:00-14:25 **Troika Engel/ Schneider, Wolters, Herrmann**
Christoph Herrmann
Individualized closed-up transcranial alternating current stimulation

14:25-14:50 **Troika Kreiter, Lang, Ernst**
Andreas Kreiter
Models, Electrodes and Mechanisms of Selective Attention

14:50-15:35 **Christoph Kayser** – *University Bielefeld, Germany*
Understanding the neural networks underlying flexible multisensory behavior

15:35-16:00 **Coffee break**

16:00-16:25	Troika Paulus, Logothetis, Obermayer Klaus Obermayer <i>Computational Models of Electric Field Effects on Neurons and Neural Populations</i>
16:25-16:50	Troika Jancke, Herlitze, König Stefan Herlitze/ Dirk Jancke <i>Serotonergic signaling and its influence on visual cortical processing</i>
16:50-17:35	Hans-Christian Pape – <i>Westfaelische Wilhelms-University Münster, Germany</i> <i>Neuropeptide S - a novel transmitter system in the brain regulation stress and anxiety</i>
19:00	Dinner (Troika members and Guests only) <i>Restaurant Stüffel (Isekai 1; 20249 Hamburg; T. 0049 40 60902050)</i>

Friday, June
7th

Session 3	Chair: Gaby Schneider
9:00-9:45	Valentina Emiliani – <i>Institute de la Vision, Sorbonne University Inserm Paris, France</i> <i>Toward circuits optogenetics</i>
9:45-10:10	Troika Kempter, Brecht, Schmitz Dietmar Schmitz <i>Differential embedding of hippocampal output neurons during high frequency oscillations</i>
10:10-10:35	Troika Gogolla, Klein, Conzelmann, Letzkus Johannes Letzkus <i>Dissection of cortico-amygdala circuits controlling aversive and appetitive behaviors</i>
10:35-11:00	Coffee break
11:00-11:45	Gustavo Deco – <i>University Pompeu Fabra, Barcelona, Spain</i> <i>Brain Songs: Discovering the relevant timescale and richness of repertoire of the human brain</i>
11:45-12:10	Troika Stroh, Westmeyer, Yu Albrecht Stroh <i>Cross-modal identification of slow wave propagation in health and disease</i>
12:10-12:35	Troika Ohl, Schmidt, Grün Sonja Grün/ Frank Ohl <i>Neurodynamics on microscopic and mesoscopic scales</i>
12:35-13:00	Troika Marshall, Schweikard, Ponomarenko Lisa Marshall <i>Manipulations through optogenetic and exogenous stimuli to investigate sleep-dependent memory consolidation, brain states and rhythms</i>
13:00-13:05	Concluding remarks