

Monday, March 2 - LIN

Public Lecture at LIN Ebbinghaus Lecture Hall (in German)

Chair: Eckart Gundelfinger

19:00 **Prof. Dr. Dr. h.c. Güntürkün, Bochum**
Nicht vergessen – Wie Vergessen zu einem neuen Lernprozess führt

Tuesday, March 3 - Herrenkrug

Morning Session 9 a.m.

Introductory Remarks

Frank Ohl, Coordinator of the Collaborative Research Center „Neurobiology of motivated behavior“

1. Inter-regional interactions in memory processing

Chairs: Markus Fendt, Volkmar Leßmann & Magdalena Sauvage

- 09.10 – 09.40 **Paul Frankland, Toronto, Canada**
The network organization of memory
- 09.45 – 10.15 **Mu-ming Poo, Berkeley/Shanghai**
Local and long-range signaling of BDNF in neural circuit plasticity
- 10.20 – 10.50 **Simone Sartori, University of Innsbruck**
The Dopamine System in Fear extinction
- 10.55 – 11.25 Coffee and Posters
- 11.25 – 11.55 **Jan Born, Tübingen**
Hippocampal-Neocortical Interactions Underlying Memory Consolidation During Sleep
- 12.00 – 12.30 **Emrah Düzel, Magdeburg**
Effects of Alzheimer's Disease pathology on episodic memory
- 12.35 – 13.40 Lunch
- 13.40 – 14.30 Poster Time (even numbers)

Afternoon Session 2.30 p.m.

2. Decision making, confidence, and metacognition

Chairs: Emrah Düzel & Markus Ullsperger

- 14.30 – 15.00 **Stephen Fleming, UCL, London**
How metacognition drives belief change: a tale of pessimism and optimism
- 15.05 – 15.35 **Chris Summerfield, Oxford**
Some uncertainty about representations of uncertainty
- 15.40 – 16.10 **Tobias Donner, Hamburg**
Recurrent cortical processing and normative belief updating
- 16.15 – 16.45 Coffee and Posters
- 16.45 – 17.15 **Max-Philipp Stenner, Magdeburg**
Prediction, Precision, and Human Experience of Action
- 17.20 – 17.50 **Dorothea Hämmerer, Magdeburg**
Do I need to care about noradrenaline? - Current insights in it's role in learning, memory and brain ageing

Hansjürgen Matthies Honorary Lecture

Chair: Klaus Reymann

18.30 – 19.30 **Prof. Tim Bliss, Fellow of the Royal Society, London**
LTP: looking back and looking forward

19.30 Meeting Buffet at Herrenkrug

Wednesday, March 4 - Herrenkrug

Morning Session 9 a.m.

3. Perceptual learning and its translatability

Chairs: Toemme Noesselt & Stefan Pollmann

- 09.00 – 09.30 **Christoph Kayser, Bielefeld**
The neural mechanisms underlying flexible multisensory behavior
- 09.35 – 10.05 **Takeo Watanabe, Brown University, RI**
Towards a unified model for perceptual learning
- 10.10 – 10.40 **Michael Beyeler, University of California, Santa Barbara**
Learning to see again: perceptual learning for sight restoration technologies
- 10.45 – 11.15 Coffee and Posters
- 11.15 – 11.45 **Brigitte Röder, Sophie Rohlf, Alexander Kramer, Lux Lee, Patrick Bruns, Hamburg**
Audio-visual integration and recalibration in children and adults
- 11.50 – 12.20 **Kristine Krug, Oxford/Magdeburg**
t.b.a.
- 12.30 – 13.30 Lunch
- 13.30 – 14.30 Poster Time (odd numbers)

Afternoon Session 2.30 p.m.

4. Cellular mechanisms of cognitive resources

Chairs: Michael R. Kreutz & Oliver Stork

- 14.30 – 15.00 **Amar Sahay, Harvard, MA**
Inhibitory interneurons, memory interference and indexing
- 15.05 – 15.35 **Elly Nedivi, MIT, MA**
Visualizing remodeling of excitatory and inhibitory circuits in vivo
- 15.40 – 16.10 **Ileana Hanganu-Opatz, Hamburg**
From oscillatory hub to psychocell: the spiny maturation of prefrontal neurons
- 16.15 – 17.15 Coffee and Posters
- 17.15 – 17.45 **Christian Lohmann, Amsterdam, NL**
Learning to see before eye opening: plasticity for wiring the developing visual system
- 17.50 – 18.20 **Janelle Pakan, Magdeburg**
Active learning shapes fundamental information coding in the visual cortex
- 19.30 Speakers' Dinner at Restaurant "Hadrys" <https://landhaus-hadrys.de/start>
Bus transfer for speakers from Herrenkrug to the restaurant: departure at 19.00
return from restaurant to Herrenkrug: 22.00

Thursday, March 5 - Herrenkrug

Morning Session 9 a.m.

5: It's in the timing ...

Chairs: Bertram Gerber & Frank Ohl

- 09.00 – 09.30 **Aparna Suvrathan, McGill University, Canada**
Heterogeneous plasticity rules in the cerebellum: from synaptic plasticity to behavior
- 09.35 – 10.05 **Markus Fendt, Magdeburg**
Timing and valence in event learning of rats
- 10.10 – 10.40 **Yoshinori Aso, HHMI Janelia**
Diversity of learning rules in Drosophila mushroom body circuits
- 10.45 – 11.15 Coffee and Posters
- 11.15 – 11.45 **Sonja Grün, Jülich**
Spatio-temporal organization of cortical activity
- 11.50 – 12.20 **Warren H Meck, Duke University, NC**
Towards a unified model of interval timing and reinforcement learning
- 12.30 – 13.30 Lunch
- 13.30 – 14.30 Poster Time

Afternoon Session 2.30 p.m.

6. Synapse beyond the synapse

Chairs: Daniela Dieterich & Constanze Seidenbecher

- 14.30 – 15.00 **Phil Haydon, Boston, MA**
t.b.a.
- 15.05 – 15.35 **Maria Andres-Alonso, Hamburg**
Signaling amphisomes or how autophagy serves synaptic function
- 15.40 – 16.10 **Stephan Sigrist, Berlin Serena Dudek, NIH, North Carolina**
Presynaptic long-term plasticity at the intersection of sleep, memory and aging
- 16.15 – 16.45 Coffee and Posters
- 16.45 – 17.15 **Valentin Nägerl, Bordeaux**
Nanoscale brain matters
- 17.20 – 17.50 **Serena Dudek, NIH, North Carolina**
Insights into hippocampal function from studies of synaptic plasticity in area CA2

18.00 Concluding Remarks, Farewell

Eckart Gundelfinger/Stefan Remy