Monday, Oct 16th

Electrons – Photons – Neurons International Symposium

Max Planck Institutes, Martinsried
T-Building - Large Lecture Hall

Session I

08:25 Chair's introduction: Axel Borst (MPI of Neurobiology, Germany)
08:30 Thomas Euler, University of Tübingen, Germany
Driving the retina's "switchboard" – Glutamate signaling in the IPL
08:50 Petra Schwille, MPI of Biochemistry, Germany
From single molecules to artificial cells
09:10 Fritjof Helmchen, University of Zurich, Switzerland
Digging deep
09:30 Rafael Yuste, Columbia University, USA
Reading the mind of a cnidarian
09:50 Michael Brecht, Humboldt University, Germany
Tickle, play, ambivalence

Break

Session II

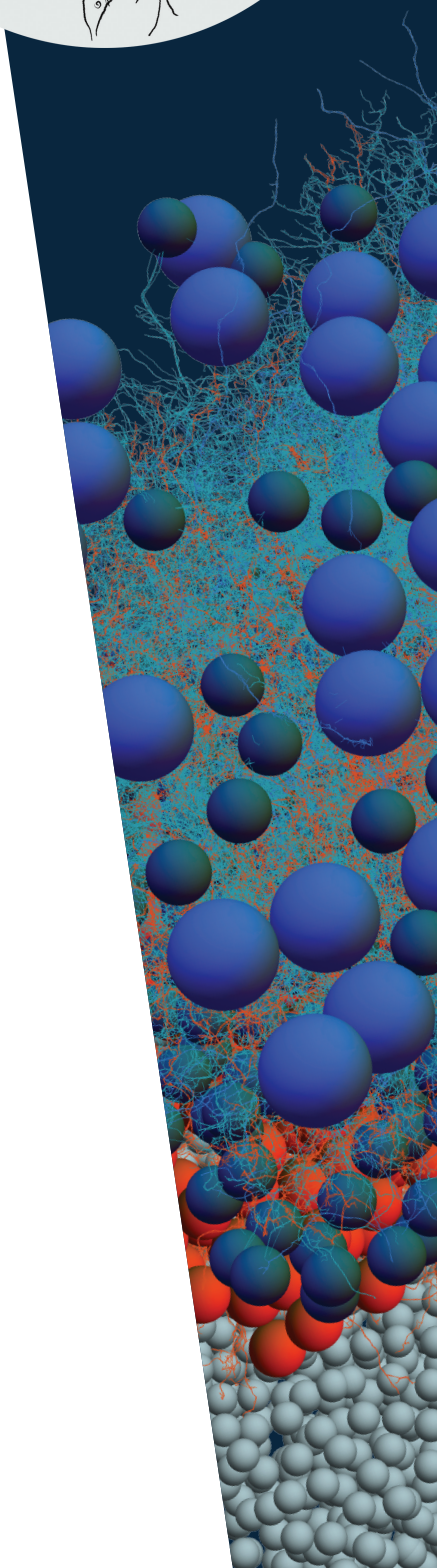
10:35 Chair's introduction: Moritz Helmstädter (MPI of Brain Research, Germany)
10:40 Gilles Laurent, MPI of Brain Research, Germany
Close imaging of the third kind
11:00 Dirk Zeidler, Zeiss, Germany
Multibeam Electron Microscopy
11:20 Kevin Briggman, caesar Research Institute, Germany
Combinatorial coding of motion stimuli in the larval zebrafish brain
11:40 Rachel Wong, University of Washington, USA
Assembly of inhibitory circuits in the retina
12:00 Gerald Rubin, HHMI Janelia Research Campus, USA
***Drosophila* Neuroanatomy**

Break

Session III

14:05 Chair's introduction: Jason Kerr (caesar Research Institute, Germany)
14:10 David Tank, Princeton University, USA
Imaging neural dynamics
14:30 Charles Gilbert, Rockefeller University, USA
Cortical dynamics
14:50 Chris Xu, Cornell University, USA
Pushing the limits of deep tissue imaging
15:10 Michale Fee, MIT, USA
Using connectomics to dissect a song learning circuit

Break

Session IV

15:55 Chair's introduction: Sebastian Seung (Princeton University, USA)
16:00 Neil Gershenfeld, MIT, USA
From bits to atoms
16:20 David Kleinfeld, UC San Diego, USA
Have you thought about imaging blood flow?
Winfried's query and things we learned about brain vascular network
16:40 Joe Howard, Yale University, USA
Microtubles, motors, mechanoreceptors and morphology
17:00 Viren Jain, Google Research, USA
Automated neuron reconstruction with machine learning
17:20 Karel Svoboda, HHMI Janelia Research Campus, USA
Denk: The first 6x10^23 femtoseconds