



Detailed program of the symposia:

1) Advances in neuromorphic systems (Org. K. Martin and S.C. Liu) 10:45-12:00

Douglas Bakum, ETH Zurich: "Uncovering neuronal cellular and network function using a high-density 11,011-microelectrode CMOS array"

Tobi Delbrück, ETH Zurich: "Seeing with silicon spike events."

Giacomo Indiveri, ETH Zurich: "What does neuromorphic engineering bring to neuroscience?"

2) Generation, degeneration, preservation: the ways of vision (Org. C. Grimm) 10:45-12:00

Botond Roska, FMI Basel: "The busy life of neural circuits in the retina"

Yvan Arsenijevic, Univ. of Lausanne: "Epigenetic control of photoreceptor death"

Cavit Agca, Univ. of Zurich: "The missing link in the degenerating retina: survival signals and cytokine regulation"

3) Imaging the nervous system (Org. K.H. Stephan and F. Helmchen) 14:30-15:45

Helge Ewers, ETH Zurich: "Seeing the forest, tree by tree - Single molecule localization-based superresolution microscopy"

Florent Haiss, Univ. of Zurich: "Two-photon calcium imaging of neuronal population activity during frequency discrimination in the head fixed rodent".

Christian Ruff, Univ. of Zurich: "Studying effective connectivity in the human brain with concurrent TMS-fMRI"

4) Plasticity in Chronic Pain: Neurons, Astrocytes, and Microglia (Org. H.U. Zeilhofer) 14:30-15:45

Jürgen Sandkühler, Univ. of Vienna: Glial-neuron interactions for LTP in spinal nociceptive pathways

Marc Suter, Univ. of Lausanne: What links peripheral injury to spinal microglia?

Thomas Nevian, Univ. of Bern: Plasticity of cortical neurons in neuropathic pain