

Program

WEDNESDAY, June 13th, 09:00 am

CO2 & SV Lobby

09:00-09:10 **Opening - Carmen Sandi**

SESSION 1 - Philippe Renaud **Neural Circuit Structure**

09:10-09:30 **Long-range connectivity of neocortex.** *Carl Petersen, Sensory Processing Laboratory*

09:30-09:50 **Exploring brain connections.** *Graham Knott, Bioelectron Microscopy Core Facility*

09:50-10:10 **Domain adaptation and active learning for microcopy imaging.** *Pascal Fua, Computer Vision Laboratory*

10:10-10:30 **Brain microstructure estimation by diffusion MRI and multicontrast imaging.** *Jean-Philippe Thiran, Signal Processing Laboratory 5*

10:30-11:00 **COFFEE BREAK**

SESSION 2 - Felix Schurmann **Neural Circuit Function**

11:00-11:20 **Afferent synaptic pathways in associative fear learning.** *Ralf Schneggenburger, Laboratory of Synaptic Mechanisms*

11:20-11:40 **Epigenetic mechanisms in Alzheimer's disease.** *Johannes Gräff, Laboratory of Neuroepigenetics*

11:40-12:00 **Wetware vs. hardware - how neuronal circuits differ from computer chips.** *Brian McCabe, Laboratory of Neural Genetics & Disease*

12:00-12:20 **Mitochondria in motivational neural circuits.** *Carmen Sandi, Behavioral Genetics Laboratory*

12:20-14:00 **LUNCH BREAK**

SESSION 3 - D. Van De Ville **Neural Circuit Computation**

14:00-14:20 **Bridging scales: From connected neurons to connected populations.** *Wulfram Gerstner, Computational Neuroscience Laboratory*

14:20-14:40 **Topological vistas in neuroscience.** *Kathryn Hess Bellwald, Laboratory for Topology and Neuroscience*

14:40-15:00 **Local circuits and holistic perception.** *Michael Herzog, Psychophysics Laboratory*

15:00-15:20 **Integrative neuroscience: an approach to reconcile diverse data and knowledge.** *Henry Markram, Neural Microcircuitry Laboratory*

15:20-16:00 **COFFEE BREAK**

SESSION 4 - Hannes Bleuler **Neurorobotics**

16:00-16:20 **How robots can learn from insects.** *Pavan Ramdya, Neuroengineering Laboratory*

16:20-16:40 **Investigating the spinal cord circuits underlying locomotion using neuromechanical simulations and bio-robots.** *Auke Ijsper, Biorobotics Laboratory*

16:40-17:00 **Robots for odor source localization.** *Alcherio Martinoli, Distributed Intelligent Systems and Algorithms Laboratory*

17:00-17:20 **Soft robotic challenges.** *Jamie Paik, Reconfigurable Robotics Laboratory*

17:20-17:30 **2017 Thesis award**

17:30-21:00 **POSTERS & BBQ**

Organizers:

Carl Petersen | BMI Team

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