BRAIN MIND INSTITUTE SYMPOSIUM

CONTROLLING BEHAVIOR IN ANIMALS AND ROBOTS

MONDAY 3TH DECEMBER 2018

08:20-08:50 Registration

08:50-09:00 Opening

Session 1 Embodied robots and computational models
Chair Auke Ijspeert

09:00-09:30 Yulia Sandamirskaya (University of Zurich, Zurich, Switzerland)
“Neuronal Dynamics of Action Representation, Execution, and Learning”

09:30-09:40 Discussion

09:40-09:55 Short Talk: TBD

09:55-10:00 Discussion

10:00-10:30 Mitsuo Kawato (ATR, Kyoto, Japan)
“Decoded neurofeedback and consciousness for learning from a small sample”

10:30-10:40 Discussion

10:40-11:10 Coffee break

11:10-11:40 Terry Stewart (University of Waterloo, Waterloo, Canada)
“Designing and Learning Cognitive Control with a Spiking Model of the Cortex-Basal Ganglia-Thalamus Loop”

11:40-11:50 Discussion

11:50-12:05 Short Talk: TBD

12:05-12:10 Discussion

12:10-12:40 Barbara Webb (University of Edinburgh, Edinburgh, UK)
TBD

12:40-12:50 Discussion

12:50-14:00 Lunch & Poster Session

Session 2 Decision making and action selection
Chair Carl Petersen

14:00-14:30 Tony Prescott (University of Sheffield, Sheffield, UK)
TBD

14:30-14:40 Discussion

14:40-14:55 Short Talk: TBD

14:55-15:00 Discussion

15:00-15:30 Daniel Huber (University of Geneva, Geneva, Switzerland)
“Cortical circuit dynamics underlying neuroprosthetic learning.”

15:30-15:40 Discussion
15:40-16:10  Coffee break

16:10-16:40  Rui Costa (Columbia University, New York, USA)  
TBD

16:40-16:50  Discussion

16:50-17:05  Short Talk: TBD

17:05-17:10  Discussion

17:10-17:40  Stefan Schaal (University of Southern California, Los Angeles, USA)  
TBD

17:40-17:50  Discussion

18:00-21:00  Poster Session / Wine & Cheese

TUESDAY 4TH DECEMBER 2018

Session 3  Motor control

Chair  Pavan Ramdya

08:30-09:00  Silvia Arber (Biozentrum, University of Basel, Basel, Switzerland)  
“Circuit Solutions for Programming Actions”

09:00-09:10  Discussion

09:10-09:25  Short Talk: TBD

09:25-9:30  Discussion

09:30-10:00  Silvia Daun (University of Cologne, Cologne, Germany)  
“Mathematical modelling of the neural control of 6-legged locomotion”

10:00-10:10  Discussion

10:10-10:40  Coffee break

10:40-11:10  Mackenzie Mathis (Harvard University, Cambridge, USA)  
"Dissecting the circuits of motor adaptation in mice"

11:10-11:20  Discussion

11:20-11:35  Short Talk: TBD

11:35-11:40  Discussion

11:40-12:10  Ansgar Buschges (University of Cologne, Cologne, Germany)  
TBD

12:10-12:20  Discussion

12:20-12:30  Final - common discussion and farewell

12:30  Possibility for Lunch at EPFL