FRIAS Motor control workshop 2017 (9/10 February 2017)

Abstract:

Biological motor control is characterized by high amounts of flexibility, adaptivity and coordination. Hundreds of skeletal muscles and numerous degrees of freedom of associated joints are controlled and coordinated with apparent ease by the central nervous system, an organ with billions of cells that work together to produce adequate motor output. As of yet humans vastly surpass the movement abilities of any man-made robot and scientists only scarcely how the brain achieves these unique human faculties. This workshop brings together experts from various fields of motor control, ranging from neurophysiology and -anatomy over computational motor control to neuronal network modelling to present and discuss recent progress in unravelling the computational and neural mechanisms of biological motor control.

Venue:

Freiburg Institute of Advanced Study (FRIAS)
Albertstrasse 19
79104 Freiburg
http://www.frias.uni-freiburg.de

Accommodation:

Stadthotel Freiburg
Karlstrasse 7
79104 Freiburg
http://www.hotel-freiburg.de

Conference program (draft)

Thursday 9. Feb. 2017

9.30 registration
9.40 welcome

9.45 – 10.30 Mark Churchland (Columbia)

10.30 – 11.15 Bjorg Kilavik (Marseille)
Sensorimotor anticipation and preparation in monkey motor cortex

11.15 – 11.30 coffee break

11.30 – 12.15 Carsten Mehring (Freiburg)

12.15 – 13.00 Byron Yu (Carnegie Mellon)
Brain-Computer interfaces for Basic Science

13.00 – 14.00 lunch at FRIAS

14.00 – 14.45 Ilka Diester (Freiburg)

14.45 – 15.30 James Poulet (MDC Berlin)

15.30 – 16.00 coffee break

16.00 – 16.45 Robert Schmidt (Sheffield)

16.45 – 17.30 Nicolas Mallet (Bordeaux)

19.00 dinner (speakers only)

Friday, 10. Feb. 2017

9.30 – 10.15 Roger Lemon (UCL)

10.15 – 11.00 Christian Leukel (Freiburg)

11.00 – 11.15 coffee break

11.15 – 12.00 David Franklin (TU Munich)
Feedforward and feedback learning in sensorimotor control

12.00 – 12.45 Joern Diedrichsen (Western Ontario)

12.45 – 14.00 lunch at FRIAS

14.00 – 14.45 Hartwig Siebner (DRCMR Copenhagen)
Tracing intra-area representational plasticity of the primary motor hand area

14.45 – 15.30 Markus Martin (Freiburg)

15.30 – 16.00 coffee break

16.00 – 16.45 Arvind Kumar (KTH Stockholm)

16.45 – 17.30 Stefan Rotter (Freiburg)

17.30 – 17.45 closing remarks

19.00 dinner at restaurant “Kaiser” (speakers only)
(http://www.freiburgerkaiser.de, Günterstalstr.38, 79100 Freiburg)