









CNP Annual Retreat
5-6th OCTOBER 2012 – HOTEL PREALPINA, CHEXBRES

CNP RETREAT – 5-6TH OCTOBER 2012 - PROGRAM

Friday Oct. 5th		
8:30	Bus at EPFL	Meeting point: taxi station Esplanade (next to the big red & white tent)
09:00 – 10:00	<i>Coffee</i>	Arrival at Hotel Prealpina : http://www.prealpina.ch/ Please hang your poster now.
10:00 – 10:30	<i>Welcome</i>	Olaf Blanke
10:30 – 11:00	Seminar 1	Ivan Minev
11:00 – 11:30	Seminar 2	Nikolaus Wenger
12:00 – 16:00	<i>Oenological discovery of the Lavaux</i>  12 21 °C	12:00-13:00 Lunch at 'Domaine Conne' in Chexbres 13:00:14:30 Wine tasting and visit of local winery 14:30-16:00 Walk to St-Saphorin (bring appropriate shoes)
16:00 – 17:00	<i>Free</i>	Last chance to hang your poster.
17:00 – 19:00	Posters session	See list at the end of the program.
19:00 – 20:00	<i>Apero</i>	
20:00 – 22:00	<i>Dinner</i>	
22:00	<i>Party</i>	Organized by CNP students
Saturday Oct. 6th		
08:30 – 10:00	<i>Breakfast</i>	
10:00 – 10:30	Seminar 3	Jack Di Giovanna
10:30 – 11:00	Seminar 4	Nathan Evans
11:00 – 11:30	<i>Coffee break</i>	
11:30 – 12:00	Seminar 5	Ricardo Chavarriaga
12:00 – 13:00	<i>Lunch</i>	Buffet standing lunch
13:15	Bus to EPFL	

CNP RETREAT – 5-6TH OCTOBER 2012 – SEMINARS

Friday Oct. 5th		
10:30 – 11:00	 <p>Ivan Minev <i>Silicone based neural electrodes</i></p>	Lacour lab http://lsbi.epfl.ch/
11:00 – 11:30	 <p>Nikolaus Wenger <i>Spinal neuroprosthetic systems to restore locomotion after spinal cord injury</i></p>	Courtine Lab http://courtine-lab.epfl.ch/
Saturday Oct. 6th		
10:00 – 10:30	 <p>Jack Di Giovanna <i>The brains behind locomotion</i></p>	Micera Lab http://tne.epfl.ch/
10:30 – 11:00	 <p>Nathan Evans <i>The neuroscience of machine-controlled body ownership and agency</i></p>	Blanke lab http://lnco.epfl.ch/
11:30 – 12:00	 <p>Ricardo Chavarriaga <i>EEG-based decoding of cognitive-related signals</i></p>	Millán lab http://cnbi.epfl.ch/

CNP RETREAT – 5-6TH OCTOBER 2012 – POSTER SESSION

Friday Oct. 5th, 17:00 – 19:00. Presenters of posters with an odd number should be available for questions during the first hour, and vice versa.

#	Authors	Title
1	E.M. Moraud, N. Wenger, M. Bonizzato, S. Raspopovic, J. DiGiovanna, P. Musienko, G. Courtine, S. Micera	Control of epidural electrical stimulation to optimize spinal neuroprosthetic systems
2	A. Sengül, M. van Elk, H. Bleuler, O. Blanke	From Surgical Robotics to Cognitive Neuroprosthetics: Tool Incorporation in the da Vinci Surgical System
3	J. von Zitzewitz, J.DiGiovanna, M. Bonizzato, N. Wenger, E. Martin, H. Vallery, A. Hasse, S. Micera, G. Courtine	Advanced robotic and interfacing technologies to train and enable locomotion after spinal cord injury in rats and mice
4	A. Sengül, G. Rognini, M. van Elk, H. Bleuler, O. Blanke	From Surgical Robotics to Cognitive Neuroprosthetics: Tool Incorporation in Virtual Reality and Haptic Interfaces
5	Q. Barraud, J. Heutschi, R. Van Den Brand, L. Friedli, P. Musienko, V. Dietz, G. Courtine	Chaotic remodeling of spinal neuronal circuitries leads to a degradation of function in the chronic state of a severe spinal cord injury
6	M.L. Blefari, J. Sulzer, M-C Hepp-Reymond, S. Kollias, R. Gassert	Guiding mental imagery using rtfMRI neurofeedback for precision grip control
7	R. Martuzzi, W. Van der Zwaag, S. Dieguez, R. Gruetter, O. Blanke	Distinct contributions of BAs 3b and 1 to illusory body ownership: a 7T fMRI study
8	A. Romeo, S. P. Lacour	Resolving the soft-to-hard mechanical interface: design, materials and technology
9	R. Martuzzi, M.E. Tsimpanouli, W. van der Zwaag, C. Lopez, O.Blanke	Visuo-vestibular convergence in the retroinsular cortex: a 7T fMRI study
10	C. Paulou, S. P. Lacour	Micropatterned silicone surfaces as instructive substrate for neuronal regeneration
11	H. Zhang, R. Chavarriaga, J. del R. Millán	Monitoring Error Related Cortical Interactions
12	M.T. Francomano, H. Vandeparre, I. Minev, S. P. Lacour	Soft pressure sensors for prosthetic manipulation
13	R. Chavarriaga, A. Biasiucci, A. Molina, R. Leeb, V. Soto León, M. Campolo, A. Oliviero, J. del R. Millán	tDCS modulates motor imagery-related BCI features
14	R. Van Den Brand, G. Courtine	Robotic neuroprosthetic interface to evaluate, enable and train locomotion after spinal cord injury and stroke
15	A. Biasiucci, R. Chavarriaga, R. Leeb, J. del R. Millán	Brain-Controlled Functional Electrical Stimulation for Motor Substitution and Recovery
16	I. Vollenweider, A. Takeoka, S. Arber, G.Courtine	Sensory control of locomotion and its role in recovery after incomplete spinal cord injury
17	R.Leeb, T. Carlson, L. Tonin, J. d.R. Millán	Hybrid Brain-Computer Interface and Shared Control for Neuroprosthesis control

#	Authors	Title
18	A. Crema, S.Micera	Wearables & robotic devices: applications for grasp rehabilitation
19	T. Carlson, R. Leeb, R. Chavarriaga and J. del R. Millán	BCI Wheelchair: Online Adaptive Shared Control
20	M. Capogrosso, S. Raspopovic, S. Micera.	Modelling the interaction between the nervous system and neural interfaces for the stimulation of peripheral and central nervous system
21	Sareh Saeedi, Ricardo Chavarriaga,Michael C. Gastpar, José del R. Millán	Prediction of fast ad slow command delivery in a motor imagery BCI
22	T.A. Khoa Nguyen, Jack DiGiovanna, Daniel M. Merfeld, Silvestro Micera	Comparing Artifact Reduction Methods for Recording Vestibular Evoked Potentials in a Vestibular Neuroprosthesis
23	R. Salomon, S. Berger, S.Eliez, M. Debbané, S. Menghetti, M. Schneider, O. Blanke	Deficits in temporal aspects of Agency in 22Q11DS
24	L. Friedli, E. S. Rosenzweig, D. Jendrich, S. C. Strand, A. R. Ferguson, P. Musienko, R. R. Roy, H. Zhong, M. S. Beattie, L. A. Havton, J. C. Bresnahan, M. H. Tuszinski, V. R. Edgerton, G. Courtine	Non-human primates show extensive functional recovery compared to rats after partial spinal cord injuries
25	S. Ionta, R. Martuzzi, R. Salomon, O. Blanke	Multisensory mechanisms of own body perception in temporo-parietal, insular, and premotor cortex revealed by functional connectivity analysis
26	J. Heutschi, R. van den Brand, Q. Barraud, J. DiGiovanna, K. Bartholdi, M. Huerlimann, L. Friedli, I. Vollenweider, E. M. Moraud, S. Duis, N. Dominici, S. Micera, P. Musienko, G. Courtine	Multi-system neuroprosthetic training restores supraspinal control of locomotion after paralyzing SCI
27	Z. Khaliliardali, R. Chavarriaga, L. Andrei Gheorghe, J. del R. Millán.	Anticipatory Brain Potentials during Car Driving: Brake & Accelerate
28	H. Sagha, R. Chavarriaga, J. del R. Millán	Detecting anomalous electrodes in BCI
29	M. K. Goel, R. Chavarriaga, J. del R. Millán	Online BCI with Stable Sources
30	M. Uscumlic, R. Chavarriaga, J. del R. Millán	EEG-based natural image search
31	L. Tonin, R. Leeb, J. del R. Millán	Discriminative modeling of spectro-temporal evolution of covert visuospatial attention
32	S. Marchesotti, G. Rognini, M. Van Elk H. Bleuler, O.Blanke	Early somatosensory processing altered by visuo-motor conflict and agency: A somatosensory evoked potential study using a robotic haptic interface
33	C. Pfeiffer, R. Martuzzi, J. Duenas, R. Gassert, O. Blanke	Neuroscience robotics to study visuo-vestibular induced changes in bodily self-consciousness
34	S. Gale, M. Prsa, O. Blanke	Alpha Band Oscillations Reflect Vestibular Stimulation: Semicircular Canal Contributions
35	S. Raspopovic, M. Capogrosso, S.Micera	Combined Finite Element / Neuron Models of Rat Sciatic Nerve: Construction, Validation, and Genetic Algorithm optimization.
36	S. Gale, M. Prsa, O. Blanke	Self-Motion Leads to Mandatory Cue Fusion Across Sensory Modalities
37	L. Bassi Luciani, V. Genovese, D. Martelli, M. Coscia, V. Monaco, L. Odetti, S. Micera	SENLy: sensorized perturbing platform for fall assessment and prevention elders and young
38	S. Perdikis, A. Ramsay, R. Leeb, J. Williamson, A. Al-Khodairy, R. Murray-Smith, J. del R. Millan	Clinical Evaluation of a hybrid-BCI text-entry system