

NeuroBridges 2015

September 7th-9th

Salle du Conseil, Université Paris Descartes
12, rue de l'École de Médecine, 75006, Paris

Monday 7.9.15

9:00-9:15 Opening words

9:15-10:15 Opening lecture **Stanislas Dehaene** (College de France & INSERM) “Decoding the time course of conscious and non-conscious operations”

10:15-10:45 Coffee Break

10:45 -11:20 **Ossama Khalaf** (EPFL, Lausanne): “In the pursuit of the fear engram: Identification of neuronal circuits underlying the treatment of anxiety disorder”

11:20-11:55 **Noam Saadon Grossman** (Hebrew University of Jerusalem, Israel): “Discontinuity of cortical gradients reflects sensory impairment”

11:55-12:30 **Cherine Fahim** (McGill University, Canada): “Lobewise correlates of internalizing and externalizing behaviors: Categorical or dimensional?”

12:30-14:00 Lunch Break

14:00-14:35 **Maoz Shamir** (Ben-Gurion University of the Negev, Israel): “Balancing feed-forward excitation and inhibition via inhibitory spike timing dependent plasticity”

14:35-15:10 **Alessandro Barri** (Institut Pasteur, Paris): “Maximising memory storage predicts the statistics of cortical activity”

15:10-15:40 Coffee Break

15:40-16:15 **Elisa Tartaglia** (Institut de la Vision, Paris): “Modulation of network excitability by persistent activity: How Working Memory affects the response to incoming stimuli”

16:15-16:50 **Noga Zaslavsky** (Hebrew University of Jerusalem, Israel): “An information-theoretic approach to learning hierarchical representations in deep neural networks”

Dinner (only for speakers)

Tuesday 8.9.15

9:00-9:35 **Valerie Ego-Stengel** (UNIC, CNRS, Gif-sur-Yvette): “Neural mechanisms of brain-machine interfaces”

9:35-10:10 **Amjad Abu-Rmileh** (Ben-Gurion University of the Negev, Israel): “Co- adaptive learning in brain computer interfaces”

10:10-10:40 *Coffee Break*

10:40 -11:15 **Shimon Marom** (Technion, Israel): “Dynamics of excitability over extended time scales”

11:15-11:50 **German Sumbre** (ENS, Paris): “Biological significance, mechanisms and development of the ongoing spontaneous activity in the zebrafish optic tectum”

11:50-12:25 **Oren Shriki** (Ben Gurion University of the Negev, Israel): “Critical dynamics in resting and evoked human brain activity”

12:25-14:00 *Lunch Break*

14:00-14:35 **Bassam Attalah** (Champalimaud Centre for the Unknown, Portugal): “A new role of midbrain dopaminergic neurons during temporal judgments”

14:35-15:10 **Mehdi Khamassi** (Université Pierre et Marie Curie, CNRS, Paris): “Dual-system reinforcement learning and dopamine-independent Pavlovian goal-tracking behaviors”

15:10-15:40 *Coffee Break*

15:40-16:15 **Ran Darshan** (Hebrew University of Jerusalem, Israel): “A minimal neural mechanism for explorative behaviors”

16:15-16:50 **Ahmed Moustafa** (University of Western Sydney, Australia): “The computational and cognitive neuropsychology of Parkinson’s disease”

Social Event + Gala Dinner (only for speakers)

Wednesday 9.9.15

9:00-9:35 **Frédéric Chavane** (INT, CNRS, Marseille): “Motion anticipation in the primary visual cortex of the awake monkey”

9:35-10:10 **Yasmine El-Shamayleh** (University of Washington, Seattle): “Invariant visual object codes in single cortical neurons”

10:10 -10:45 **Thérèse Collins** (LPP, Université Descartes, Paris): “Corollary discharge in human superior colliculus”

10:45-11:15 *Coffee Break*

11:15 -11:50 **Najib Majaj** (New York University, New York): “Simple learned weighted sums of inferior temporal neuronal firing rates accurately predict human object recognition performance”

11:50-12:25 **Melodie Durnez** (CNPP, Université Descartes, Paris): “Persistent activity as a result of stimulus-driven network-wide re-organization of the pattern of firing rates”

12:25-12:40 *Closing Remarks*

12:40-13:30 *Light Lunch*