

### **Session 1: Homeostasis: from the neuron to the brain**

*Chairs: John Rothwell + Paolo Calabresi*

8:30 -9:15 lecture 1 (35'+10' discussion) *The molecular bases of the homeostatic plasticity control.* Dick Tsien

9:15-10:00 lecture 2 (35'+10' discussion) *Beyond Neurons: Immune (glymphatic?) system and synaptic plasticity.* Diego Centonze

10:00-10:45 lecture 3 (35'+10' discussion) *Tracing plasticity in the human motor cortex: use-dependency and homeostasis;* Hartwig Siebner

10:45-11:15 break

11:15-12:05 lecture 4: (40'+10' discussion) *Sleep and Homeostasis;* Chiara Cirelli

12:05-12:15 Comments from the Chairs (2 slides each)

12:15-12:45 general discussion

12:45-14:45 Lunch and Poster session 1,

Chairs: Paolo Giralda, Daniele Volpe, Antonio Mantovani

### **Session 2: Frontiers in Neuro-Rehabilitation**

*Chairs: Giovanni Abbruzzese + Giuseppe Frazzitta*

14:45-15:30 lecture 1 (35'+10' discussion) *Early rehabilitation in stroke?* Ralph Nudo

15:30-16:15 lecture 2 (35'+10' discussion) *Effects of transspinal direct stimulation on sensorimotor plasticity.* Jack Martin

16:15-17:00 lecture 3 (35'+10' discussion) *Effects of Reward on Brain Plasticity: Implications for Rehabilitation.* Leo Cohen

17:00-17:30 break

17:30-18:30 lecture 4 (40'+10' discussion) *Genetics, plasticity and Rehabilitation.* Nir Giladi

18:20-18:30 Comments from the Chairs (2 slides each)

18:30-19:00 Discussion

19:00-19:15 Paolo Fresco *Remarks*

19:15-20.15 Cocktail

September 13, 2016

### **Session 3: Brain oscillations and plasticity**

*Chairs: Paolo Manganotti +Simone Rossi*

8:30 -9:15 lecture 1 (35'+10' discussion) *TEP: principles and clinical applications.* Marcello Massimini

9:15-10:00 lecture 2 (35'+10' discussion) *Detection and classification by advanced EEG analyses in neuropsychiatric disorders.* Nathan Intrator

10:00-10:45 lecture 3 (35'+10' discussion) *Brain connectivity analyses with EEG: Techniques and Clinical Applications.* Paolo Rossini

10:45-11:10 break

11:10-12:00 lecture 4 (40'+10' discussion) *Closed loop stimulation: a future approach to neurological disorders.* Ulf Ziemann

12:00-12:10 Comments from the Chairs (2 slides each)

12:10-12:40 general discussion

12:40-14:45 Lunch and Poster session 2

Chairs: Paolo Giralda, Emiliano Ricciardi, Lucio Marinelli

### **Session 4: Brain oscillations in Neurological Disorders**

*Chairs: Ioannis Isaias, Enzo DiLazzaro*

14:45-15:30 lecture 1 (35'+10' discussion) *Movement inhibition and prefrontal modulation of beta oscillations.* Giacomo Koch

15:30-16:15 lecture 2 (35'+10' discussion) *What we have learned about dystonia from oscillatory activity in basal ganglia.* Wolf-Julian Neumann

16:15-17:00 lecture 3 (35'+10' discussion) *What we have learned about Parkinson's disease from oscillatory activity in basal ganglia.* Guglielmo Foffani

17:00-17:30 break

17:30-18:30 main lecture (40'+10' discussion) *Transcranial alternating current stimulation: an*

*appealing tool to modulate brain oscillations.* Simone Rossi

18:20-18:30 Comments from the Chairs (2 slides each)

18:30-19:00 Discussion

19:00-19:30 *What's in the pipeline? Highlights from the posters;* Paolo Girlanda, Daniele Volpe, Lucio Marinelli, Antonio Mantovani, Emiliano Ricciardi

*September 14, 2016*

**Session 5: Functional plasticity in Neuropsychiatry (and beyond)**

*Chairs: Mark George + Walter Paulus*

8:30 -9:15 lecture 1 (35'+10' discussion) *Impulse control disorders and plasticity.* Pietro Pietrini

9:15-10:00 lecture 2 (35'+10' discussion) *To sleep, per chance to dream.* Giulio Tononi

10:00-10:45 lecture 3 (35'+10' discussion) *Modulation of gamma activity and conscious awareness in dreams.* MA Nitsche

10:45-11:10 break

11:10-12:00 lecture 4 (40'+10' discussion) *Memory formation: from physiology to pathology.* Cristina Alberini

12:00-12:10 Comments from the Chairs (2 slides each)

12:10-12:35 Discussion

12:35-13:00 *Summary & Concluding remarks* Mark Hallett