

Symposium: From Cortical Microcircuits to Consciousness | 11-13 April 2022

| Time | Monday, 11 April 2022 | Time | Tuesday, 12 April 2022 | Time | Wednesday, 13 April 2022 |
|---------------|---|---------------|--|---------------|--|
| 8:00 – 9:00 | Registration & get to know | 8:00 – 09:00 | Coffee | 8:00 – 09:00 | Coffee |
| 9:00 – 9:30 | <p align="center">Welcome & Introduction Alain Destexhe Centre National de la Recherche Scientifique Walter Senn University of Bern</p> <p align="center">Human Brain Project: Challenges and Achievements Katrin Amunts (Human Brain Project Scientific Research Director)</p> | | Session III - Neural correlates of perception Chair: Alain Destexhe Centre National de la Recherche Scientifique | | Session V - Brain rhythms and neural correlates of consciousness Chair: Walter Senn University of Bern |
| | Session I - EBRAINS and cortical connectome Chair: Katrin Amunts Forschungszentrum Jülich | 09:00 – 09:40 | Multimodal sensory integration and awareness Cyriel Pennartz University of Amsterdam | 09:00 – 09:40 | Visual cortical prosthesis to restore vision Pieter Roelfsema Netherlands Institute for Neuroscience |
| 9:30 – 10:00 | Introduction to EBRAINS and The Virtual Brain Viktor Jirsa Aix-Marseille University | 09:40 – 10:20 | Measures of consciousness Johan Storm University of Oslo | 09:40 – 10:20 | Bottom-up construction of brain models for sensory processing and perception Alain Destexhe EITN |
| 10:00 – 10:30 | The cortical connectome as a scientific endeavour Christof Koch Allen Institute for Brain Sciences | 10:20 – 10:40 | Career Coffee break with Cyriel Pennartz | 10:20 – 10:50 | Career Coffee break with Christof Koch |
| 10:30 – 11:00 | Coffee break | 10:40 – 11:20 | Cortical feedback signals Lars Muckli University of Glasgow | 10:50 – 11:30 | Neural correlates of consciousness Marcello Massimini University of Milan |
| 11:00 – 11:40 | EBRAINS for modelling neurons, networks and synaptic plasticity Michele Migliore Italian National Research Council | 11:20 – 12:00 | Creative sleep, adversarial dreams, and the need of awareness Walter Senn University of Bern | 11:30 – 12:30 | Conscious Brains and Machines Christof Koch Allen Institute for Brain Sciences |
| 11:40 – 12:00 | Hippocampal learning and Alzheimer's disease Ausra Saudargiene Lithuanian University of Health Sciences | 12:00 – 13:20 | Lunch break | 12:30 – 13:30 | Lunch break |
| 12:00 – 12:40 | Multiscale models of basal ganglia in learning and conscious processing Jeanette Hellgren-Kotaleski KTH Royal Institute of Technology | | Session IV - Awareness & consciousness Chair: Viktor Jirsa Aix-Marseille University | | Parallel Sessions |
| 12:40 – 14:00 | Lunch break | 13:20 – 14:00 | Learning to uncover structure: insights from intracranial EEG Lucia Melloni Max Planck Institute for Empirical Aesthetics | 13:30 – 15:00 | Poster Sessions |
| | Session II - Neural basis of learning and cognition Chair: Michele Migliore Institute of Biophysics, Italian National Research Council | 14:00 – 14:40 | Global brain states, cognition and consciousness Stanislas Dehaene Collège de France | 13:30 – 15:00 | Hands on The Virtual Brain. Workflows of The Virtual Brain for brain network simulations and data integration Marmaduke Woodman Aix-Marseille University |
| 14:00 – 14:40 | Perceptual awareness and top-down control Matthew Larkum Humboldt University Berlin | 14:40 – 15:10 | Career Coffee break with Lucia Melloni | | Session VI - Learning and brain dynamics in diseased brain Chair: Ausra Saudargiene Lithuanian University of Health Sciences |
| 14:40 – 15:20 | Modeling conscious neurons Panayiota Poirazi FORTH Institute of Molecular Biology & Biotechnology | 15:10 – 15:50 | On the neural correlates of consciousness Melanie Boly University of Wisconsin | 15:00 – 15:40 | Epilepsy and the Virtual Brain Viktor Jirsa Aix-Marseille University |
| 15:20 – 15:50 | Career Coffee break with Matthew Larkum | 15:50 – 16:30 | Prefrontal state controls access to consciousness Theofanis I. Panagiotaropoulos Inserm, Neurospin | 15:40 – 16:20 | Astrocyte-neuron interactions: From synapses to cognition and brain disease Marja-Leena Linne Tampere University |
| 15:50 – 16:30 | Plasticity on behavioural time scales Wulfram Gerstner EPFL | 16:30 – 17:00 | Coffee break | 16:20 – 17:00 | Brain network simulations in disease Petra Ritter Charité University Medicine Berlin |
| 16:30 – 17:10 | Learning in minds and machines Chris Summerfield University of Oxford | 17:00 – 18:00 | Public Keynote Evening Lecture The Importance of Being Conscious Kathinka Evers Uppsala University | 17:00 – 17:30 | Farewell |
| 19:00 – 22:30 | Live Jazz Welcome Reception at the Tour Montparnasse | 18:00 – 19:00 | Panel Discussion: Ethics and Consciousness Research Chair: Cyriel Pennartz University of Amsterdam Kathinka Evers Uppsala University Christof Koch Allen Institute for Brain Sciences Lucia Melloni Max Planck Institute for Empirical Aesthetics | | |