

YOUNG RESEARCHERS EVENT

BRAIN MODELS AND COMPUTATION FOR BRAIN MEDICINE

Bulgarian Academy of Sciences, Sofia, Bulgaria
18 April 2018



SCIENTIFIC PROGRAMME

This event is open to the entire scientific community
but especially targets young researchers.

Co-funded by
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The human brain produces, processes and transmits information in an incomparable manner. Researchers and scientists from all over the world strive to decode the mechanisms underlying this multi-level and highly complex system. The Human Brain Project is a major driving force in the field of neuroscience research in Europe, aiming to model the brain and reproduce its complexity on computing platforms.

This event is open to the entire scientific community but especially targets young researchers. It provides an overview of elements of brain modelling tools both from software and hardware perspectives. The programme comprises several sessions where participants get ample opportunities to exchange information and knowledge with peers as well as renowned experts working in the Human Brain Project.

WEDNESDAY 18 APRIL

08:30 - 09:00	Registration
09:00 - 09:15	Welcome note and introduction to the Human Brain Project Katrin Amunts, Chair of Science and Infrastructure Board HBP Thomas Skordas, Director DG CONNECT, European Commission
09:15 - 09:45	The HBP human brain atlas - Concepts and applications for neuroscience and neurology Katrin Amunts, Forschungszentrum Jülich/Heinrich Heine University Düsseldorf, Germany
09:45 - 10:30	The HBP human brain atlas website - Tips and tools Yann Leprince, Commissariat à l'Énergie Atomique, Paris, France
10:30 - 11:00	Coffee break
11:00 - 11:45	From HPC brain models to clinical applications Viktor Jirsa, Aix-Marseille University, France
11:45 - 12:30	The Medical Informatics Platform Bogdan Draganski, Centre hospitalier universitaire vaudois, Switzerland
12:30 - 13:30	Lunch break
13:30 - 14:00	The Human Brain Project Collaboratory Allan Francani, École polytechnique fédérale de Lausanne, Switzerland
14:00 - 14:30	Scaling up your neuroscience research - HBP infrastructure provided by Fenix & HPAC Platform Anna Lühns, Forschungszentrum Jülich, Germany
14:30 - 15:15	Neuronal network simulations with NEST using high-performance computing facilities Susanne Kunkel, University of Oslo, Norway
15:15 - 15:45	Coffee break
15:45 - 16:30	Neuromorphic computing within the Human Brain Project Adam Perrett, University of Manchester, United Kingdom
16:30 - 17:30	Ethics and data governance in the Human Brain Project Tyr Fothergill, De Montfort University, United Kingdom
17:30 - 18:15	Panel discussion: What can we expect from data science and simulation for brain medicine? Panelists: Viktor Jirsa, Susanne Kunkel, and Bogdan Draganski Chair: Anna Lühns, Forschungszentrum Jülich, Germany
18:15 - 18:30	Closing remarks Katrin Amunts, Forschungszentrum Jülich/Heinrich Heine University Düsseldorf, Germany

Venue information:

Bulgarian Academy of Sciences, Sofia
15-ti noemvri 1 str.
1000 Sofia Center
Bulgaria

Sessions chaired by:

HBP Student Representative Sandra Diaz,
Forschungszentrum Jülich, Germany



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