YOUNG RESEARCHERS EVENT

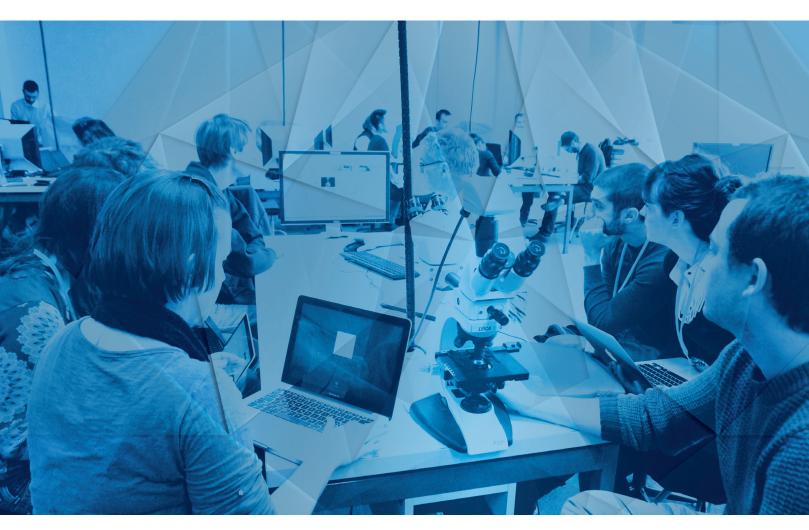# BRAIN MODELS AND COMPUTATION FOR BRAIN MEDICINE

Bulgarian Academy of Sciences, Sofia, Bulgaria
18 April 2018

Registration deadline: 9 April 2018
Attendance is free, but registration is required.

Further information:
education.humanbrainproject.eu/web/young-researchers-event-2018

Registration:
http://bit.ly/HBPYRE18

For enquiries contact:
education@humanbrainproject.eu

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

Co-funded by
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Human Brain Project

SCIENTIFIC PROGRAMME

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, Forschungszentrum Jülich/Heinrich Heine University Düsseldorf, Germany
tbc

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, Forschungszentrum Jülich, Germany

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, CHUV, Switzerland

12:30 - 13:30 **Lunch break**

13:30 - 14:00 **The Human Brain Project Collaboratory**
tbc

14:00 - 14:30 **Scaling up your neuroscience research - HBP infrastructure provided by Fenix & HPAC Platform**
Anna Lührs, 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**
Adam Perret, 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 **Debate: What can we expect from data science and simulation for brain medicine?**
tbc

18:15 - 18:30 **Closing remarks**
tbc

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

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