

Human Brain Project

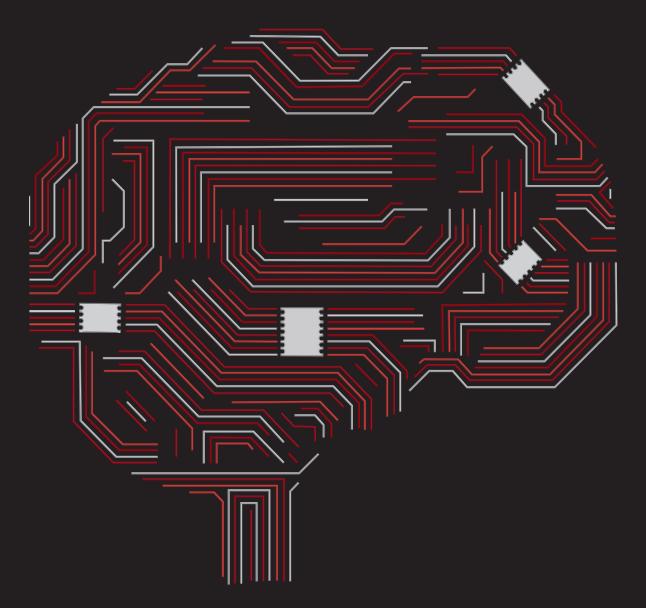
**Education Programme** 

4th HBP SCHOOL FUTURE COMPUTING

BRAIN SCIENCE AND ARTIFICIAL INTELLIGENCE

12-18 June 2017 Obergurgl University Center, Austria

Application deadline: 22 March 2017



#### For more information visit:

#### education.humanbrainproject.eu/web/fourth-school

Contact:

education@humanbrainproject.eu

#### Preliminary Scientific Programme:

#### as of 2 March 2017

The 4<sup>th</sup> HBP School offers a comprehensive programme covering all aspects of software, hardware, simulation, databasing, robotics, machine learning and theory relevant to the HBP research programme. Lectures, hands-on tutorials and practical exercises on software tools and neuromorphic hardware systems provide a high level view of the project, computing and ethical aspects of artificial neural systems. The school offers ample opportunities for scientific exchange between students and faculty during dedicated discussion sessions, tutorials and various social events.

# Monday 12 June: Arrival Day

**16:00 - 18:00** Registration

18:00 - 18:30 Welcome reception

18:30 - 20:00 Dinner

20:00 - 21:30 The era of cognitive computing Karlheinz Meier (UHEI)

#### Tuesday 13 June:

08:30 - 10:00 High Performance Computing I Speaker tbc

**10:00 - 10:30** Coffee break

10:30 - 12:00 Principles of brain computation I Speaker tbc

12:00 - 13:30 Lunch break

13:30 - 16:30 Parallel tutorials \*

16:30 - 17:00 Coffee break 17:00 - 18:30 Student lightning talks Session I

18:30 - 20:00 Dinner

20:00 - 21:30 Poster session I

### Wednesday 14 June:

08:30 - 10:00 High Performance Computing II Speaker tbc

**10:00 - 10:30** Coffee break

10:30 - 12:00 Principles of brain computation II Speaker tbc

12:00 - 13:30 Lunch break

13:30 - 16:30 Parallel tutorials \*

16:30 - 17:00 Coffee break

17:00 - 18:30 Student lightning talks Session II

18:30 - 20:00 Dinner

20:00 - 21:30 Poster session II

#### Thursday 15 June:

08:30 - 10:00 Neuromorphic computing I Giacomo Indiveri (ETHZ)

10:00 - 10:30 Coffee break

10:30 - 12:00 Databases and cloud I Speaker tbc

12:00 - 13:30 Lunch break

13:30 -18:30 Social programme

**18:30 - 20:00** Dinner

# Friday 16 June:

08:30 - 10:00 Neuromorphic computing II Giacomo Indiveri (ETHZ)

10:00 - 10:30 Coffee break

10:30 - 12:00 Databases and cloud II Speaker tbc

12:00 - 13:30 Lunch break

13:30 - 16:30 Parallel tutorials \* Obergurgl University Center, Austria 12-18 June 2017

22 March 2017

**16:30 - 17:00** Coffee break

17:00 - 18:30 Machine learning and Artificial Intelligence I Speaker tbc

18:30 - 20:00 Dinner

20:00 - 21:30 The eye and the visual system Dan Nilsson (LU)

# Saturday 17 June:

08:30 - 10:00 Robotics I Gordon Cheng (TUM)

**10:00 - 10:30** Coffee break

10:30 - 12:00 Robotics II Gordon Cheng (TUM) 12:00 - 13:30 Lunch break

13:30 - 16:30 Parallel tutorials \*

**16:30 - 17:00** Coffee break

17:00 - 18:30 Machine learning and Artificial Intelligence II Speaker tbc

18:30 - 20:00 Dinner

20:00 - 21:30 Farewell

# Sunday

#### 18 June: Departure Day

# \* PARALLEL TUTORIALS

T1: Python Tutor tbc

T2: Theory Tutor tbc

T3: BrainScaleS Tutor tbc

T4: SpiNNaker Tutor tbc

# Human Brain Proje

4<sup>th</sup> HBP SCHOOL - FUTURE COMPUTING BRAIN SCIENCE AND ARTIFICIAL INTELLIGENCE

Application for this school is open to the whole student community and early post-docs. Up to 40 applicants will be selected based on an academic decision by the Scientific Director. Participants are required to submit an abstract on their current research with their application. Applications from young female investigators are highly encouraged.

There is no registration fee. Accommodation will be provided. Seven travel grants will be available upon request (European students only).

This programme may be subject to change.

For more information visit: education.humanbrainproject.eu/web/fourth-school **Scientific Director:** 

Karlheinz Meier | UHEI

Contact: education@humanbrainproject.eu Organisers:

Viktoria Tipotsch, Theresa Rass | MUI



UNIVERSITÄT HEIDELBERG ZUKUNFT SEIT 1386





ne: 22 March 2017