

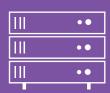
3RD HBP CURRICULUM WORKSHOP SERIES HIGH-PERFORMANCE COMPUTING FOR NEUROSCIENCE:

HANDS-ON INTRODUCTION TO SUPERCOMPUTING
USAGE, TOOLS AND APPLICATIONS

9-11 JULY 2019

FORSCHUNGSZENTRUM JÜLICH, GERMANY

SCIENTIFIC PROGRAMME





WORKSHOP INFORMATION

Neuroscience has become highly interdisciplinary, thus supercomputing and good data management strategies have become indispensable to the field. This workshop will set the grounds for students to get started with high-performance computing (HPC)-based research and lays the foundation for them to make state-of-the-art advancements in their fields. The workshop will teach scientific computing in Python, include an introduction to HPC and handson trainings for applications that can be used on supercomputers and standard computers, e.g. the simulators NEST and Arbor, as well as visualisation tools. A prior experience with at least one programming language (e.g. Python, C or C++) is highly recommended.

Scientific Chair:

Abigail Morrison | Forschungszentrum Jülich

Organisers:

Sylvia Aßlaber | Medical University Innsbruck Laura Saxer | Medical University Innsbruck Anna Lührs | Forschungszentrum Jülich Alexander Peyser | Forschungszentrum Jülich Meredith Peyser | Forschungszentrum Jülich

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Further information:

http://bit.ly/ICT_HPC2019







TUESDAY 9 JULY 2019

08:30 - 9:00	Registration
09:00 - 09:30	Welcome & introduction Abigail Morrison Forschungszentrum Jülich
09:30 - 10:30	Introduction to Python, part I Fahad Khalid Forschungszentrum Jülich
10:30 - 11:00	Coffee break
11:00 - 12:30	Introduction to Python, part II Fahad Khalid Forschungszentrum Jülich
12:30 - 13:30	Lunch break
13:30 - 15:30	Scientific Computing in Python part I Wouter Klijn Forschungszentrum Jülich
15:30 - 16:00	Coffee break
16:00 - 17:30	Scientific Computing in Python part I Wouter Klijn Forschungszentrum Jülich
17:30	Poster session & social evening

WEDNESDAY 10 JULY 2019

08:30 - 10:30	Introduction to High-Performance Computing Alberto Madonna Swiss National Supercomputing Centre
10:30 - 11:00	Coffee break
11:00 - 12:30	HPC data management Lena Oden FernUniversität in Hagen
12:30 - 13:30	Lunch break
13:30 - 15:30	Introduction to parallel computing, part I Jan Meinke Forschungszentrum Jülich
15:30 - 16:00	Coffee break
16:00 - 17:30	Introduction to parallel computing, part II Jan Meinke Forschungszentrum Jülich
17:30 - 18:00	Guided tour to the supercomputing facilities at Jülich Supercomputing Centre Andreas Müller Forschungszentrum Jülich

THURSDAY 11 JULY 2019

08:30 - 10:00	Getting started with NEST Susanne Kunkel Norwegian University of Life Sciences
10:00 - 10:30	Coffee break
10:30 - 12:00	Getting started with Arbor Benjamin Cumming Swiss National Supercomputing Center
12:00 - 13:00	Lunch break
13:00 - 14:00	Interactive visual data analysis Benjamin Weyers University of Trier
14:00 - 14:15	Access to Fenix Infrastructure Anne Carstensen Forschungszentrum Jülich
14:15 - 14:30	Introduction to the focus exercises Abigail Morrison Forschungszentrum Jülich
14:30 - 15:00	Focus exercises I
15:00 - 15:30	Coffee break
15:30 - 17:30	Focus exercises II
17:30 - 18:00	Closing session

NOTES



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humanbrainproject.eu/education