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Human Brain Project

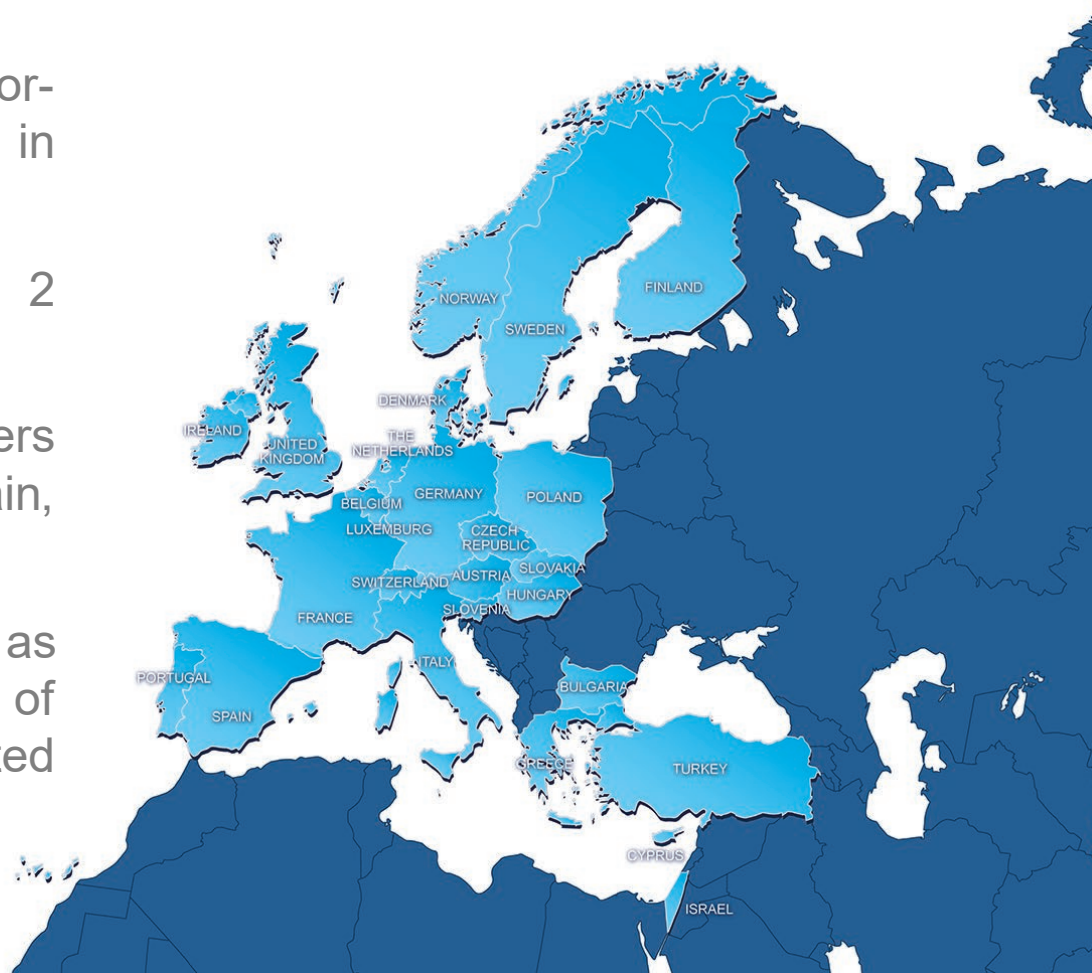
Introduction to PRACE training

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Partnership for Advanced Computing in Europe

- PRACE is an international not-for-profit association with seat in Brussels, Belgium
- PRACE counts 26 members and 2 observers
- The PRACE Tier-0 Hosting Members are France, Germany, Italy, Spain, and Switzerland
- PRACE is funded by its members, as well as through a series of implementation projects supported by the European Commission



PRACE - Mission

- The mission of PRACE is to enable high-impact scientific discovery and engineering R&D in all disciplines through extreme-scale simulation, in order to enhance European competitiveness for the benefit of society.
- PRACE seeks to accomplish this mission by offering world class High-Performance Computing services, accessed via a internationally-respected peer review process, supervised by the leading scientific communities in Europe.

PRACE - Tier-0 Systems in 2018



MareNostrum (#25):
Lenovo
BSC, Barcelona,
Spain



MARCONI (#19):
Lenovo
CINECA, Bologna,
Italy



Piz Daint (#5):
Cray XC50
CSCS, Lugano,
Switzerland



JUWELS M1 (#26):
Bull Sequana
GCS@FZJ, Jülich,
Germany



Hazel Hen (#30):
Cray
GCS@HLRS,
Stuttgart, Germany



SuperMUC-NG (#8):
Lenovo
GCS@LRZ, Garching,
Germany



JOLIOT-CURIE (#40):
Bull Sequana
GENCI/CEA, Bruyères-
le-Châtel, France

PRACE - Facts and figures

Since 2010, PRACE has established a persistent pan-European infrastructure, providing open access, training and support in HPC for open research, both to academic and industrial users, and free at the point of usage:

- PRACE has mobilized close to 600 million euros, funded by PRACE members (85%) and the European Commission (15%) through various implementation phase projects.
- PRACE has currently a combined capacity of ~110 Petaflop/s of peak performance, on 7 world-class systems
- PRACE has enabled more than 650 large-scale scientific projects and has awarded close to 20 billion core hours to more than 3.000 international researchers from science and industry
- PATC programme has trained close to 12.000 people
- The new HLST programme has been created to boost the performance of European applications towards exascale

PRACE - HPC training at European Level

PRACE Advanced Training Centers (PATC):

- Barcelona Supercomputing Center (Spain)
- CINECA Consorzio Interuniversitario (Italy)
- CSC - IT Center for Science Ltd (Finland)
- EPCC at the University of Edinburgh (UK)
- Gauss Centre for Supercomputing (Germany)
- Maison de la Simulation (France)

PRACE Training Centers (PTC):

- IT4I - National Supercomputing Center VSB Technical University of Ostrava (Czech Republic)
- GRNET - Greek Research and Technology Network (Greece)
- ICHEC - Irish Centre for High-End Computing (Ireland)
- SURFsara (The Netherlands)

PRACE - Training Mission

Carry out and coordinate training and Training Centres education activities that foster the efficient usage of the infrastructure available through PRACE.



More than 100 training events per year

PRACE Training Activities

Single Events

- On-demand Events
- Trainer Mobility

Regular Programmes

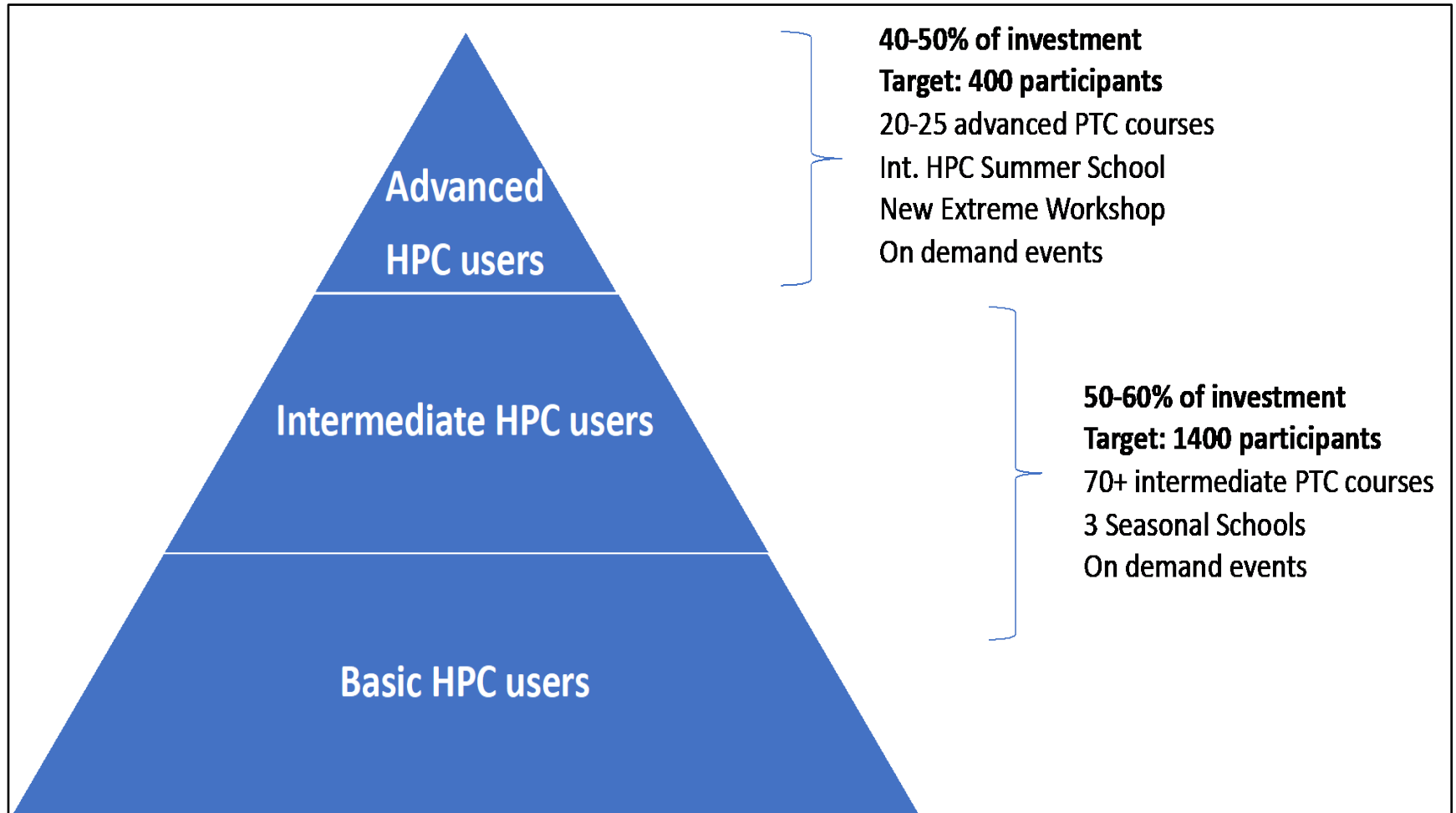
- PATCs/PTCs
- Seasonal Schools (incl. IHPCSS)
- Summer of HPC

Online Training

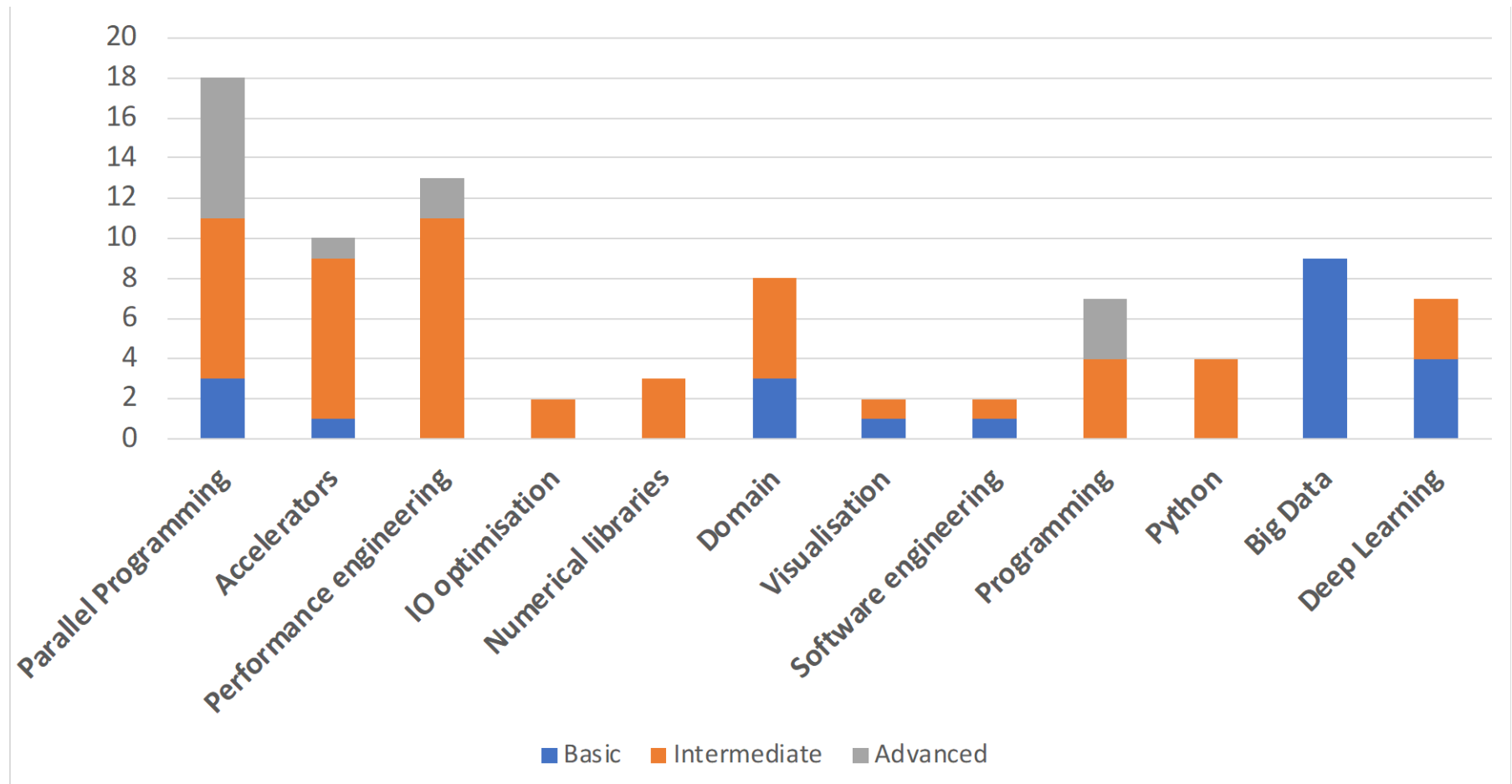
- MOOCs
- CodeVault

Training & Events Portal

PRACE Training Strategy



PRACE training programme 2018-2019



PRACE training

<http://www.training.prace-ri.eu/>