



ETP 4 HPC



exdci
European
Extreme Data
& Computing
Initiative

European Exascale Projects and their International Collaboration Potential

Supercomputing Conference 2016 (SC'16), Salt Lake City Utah



SC16
Salt Lake City, UT
November 13-17, 2016

Birds-of-a-Feather Session (BOF)
on Wednesday 16th of November 2016 in Room 155-A,
from 10:30am to 12pm

Organised by ETP4HPC on behalf of EXDCI

Programme

The **European HPC projects** will showcase their work, aiming to seed new collaborations with international partners, to accelerate progress in Exascale research and development.

Within the European HPC effort, a number of projects are running and funding has been guaranteed for further investments in a variety of areas covering the entire HPC system stack (i.e. the **European HPC Technology Projects**) and application expertise (in the form of **Centres of Excellence for Computing Applications**).

We have also developed the concept of Extreme-Scale Demonstrators, i.e. the prototypes of future European Exascale machines (<http://www.etp4hpc.eu/en/esds.html>).

Our roadmap for the development of European HPC Technology is based on the **Strategic Research Agenda (SRA) of ETP4HPC** (www.etp4hpc.eu), an industry-led think tank, a result of an established dialogue involving the HPC community and user groups such as the Big Data community, application users and experts and industrial users.

Material, including a **European Technology Handbook**, will be available prior to the meeting, at <http://www.etp4hpc.eu/euexascale.html>, providing background reading of the European HPC Technology Ecosystem and more detailed information about the projects that make up the ecosystem.

We will highlight the most important areas of these technologies, discuss opportunities for international collaboration, and identify key mechanisms required to facilitate this process.

This BOF session is a follow-up on the SC'15 BOF, which was a huge success, and other previous BOF sessions.

Project representatives will be present to facilitate.

5% - Brief summary of the development of European HPC and its Technology/Application eco-system – Jean-François Lavignon / Jean-Pierre Panziera, ETP4HPC Chair

5% - The key successes and achievements of the European HPC technology projects – Peter Hopton, Iceotope Project

15% - An overview of the international collaboration opportunities created by the European HPC Technology Projects – Guy Lonsdale, Scapos AG

5% - Extreme-Scale Demonstrators – Thomas Eickermann, Jülich Supercomputing Centre

5% - An overview of the European Centres of Excellence for Computing Applications (CoEs) – Jesus Labarta, Barcelona Supercomputing Center

65% - A discussion (involving a panel of experts from Europe and other regions, e.g. Us and Japan) on: 1) the opportunities for international collaboration (e.g. in what areas would other regions like to collaborate), and, 2) the mechanisms needed to stimulate this process (e.g. are there any networking opportunities? What is needed to strengthen this process?). Material will be available summarizing our current knowledge on such opportunities (e.g. existing workshops, conferences, etc.).

Panel Discussion Members:

1 MODERATOR: François Bodin – the Scientific Director of EXDCI (Extreme Data and Computing Initiative, the European HPC Strategy Coordination Project)

2 Luis C. Busquets Pérez - The European Commission

3 Paul Messina – US Exascale Computing Project Director

4 Mitsuhiro Sato – Riken of Japan

5 Alison Kennedy – Hartree Centre Director

6 Jesus Labarta – BSC – Leader/member of a number of HPC technology projects

7 Jean-Pierre Panziera – Bull/Atos

8 Sai Narasimhamurthy – Seagate

9 Christian Simmendinger – T-Systems

10 Eric Van Hensbergen – ARM

11 Mark Asch – BDEC (Big Data and Exa-scale Computing)