



RED ESPAÑOLA DE
SUPERCOMPUTACIÓN



**Barcelona
Supercomputing
Center**
Centro Nacional de Supercomputación

High Performance Innovation Conference

DATE: Monday 30th March, 2020
VENUE: Aula Master UPC. C/ Jordi Girona, 29-31.
08034 Barcelona (Spain)

The Spanish Supercomputing Network (RES) and the Barcelona Supercomputing Centre (BSC) organize the **HPI Conference** aimed at promoting the adoption of High Performance Computing (HPC) among the academic, business, and public administration sectors.

The Centres of Excellence (CoE) develop leading edge technologies to promote the adoption of advanced HPC in industry and public administration, and increase competitiveness for European companies and SMEs through access to CoE expertise and services.

BIOEXCEL: CoE for Computational Biomolecular Research

COMPBIOMED: Centre of Excellence for Computational Biomedicine

CHEESE: Centre of Excellence in the domain of Solid Earth

EOCOE: Energy-oriented Centre of Excellence

ESIWACE: Excellence in Simulation of Weather and Climate in Europe

EXCELLERAT: European Centre of Excellence for Engineering Applications

MAX: MAterials design at the eXascale

POP: Performance Optimisation and Productivity

PROGRAM

09:00h *Registration*

09:30h *Welcome address.* **Sergi Girona**, Director Operations, RES Manager, BSC

09:35h *Competence Centres in HPC. Their role in European innovation.* **Bastian Koller**, HLRS, Stuttgart, Germany

10:10h *The Centres of Excellence in HPC.* Chair: **Sergi Girona**, Director Operations, RES Manager, BSC

10:15h *Software availability for computational biomedicine.* **BIOEXCEL Josep Ll. Gelpí**, INB Computational platform, Team Leader. Life Sciences Department, BSC

10:35h *Simulating the effect of personalised medical treatments and interventions.* **COMPBIOMED Mariano Vázquez**, High Performance Computational Mechanics Group Manager, CASE, BSC

10:55h *Predicting techniques for global hazards, earthquakes and volcanos.* **CHEESE Arnau Folch**, Environmental Simulations Group Manager, CASE, BSC

11:15h *Coffee break*

11:35h *Towards exascale for low carbon energy.* **EOCOE Herbert Owen**, Director Wind for Energy Scientific Challenge, CASE, BSC

11:55h *Enabling European weather and climate models to leverage the performance of pre-exascale systems.* **ESIWACE Kim Serradell**, Computational Earth Sciences Group Leader, Earth Sciences Department, BSC

12:15h *Millions to hundreds of millions of simulations are needed to optimise the properties and performances of a material or a device.* **MAX Rogeli Grima**, Senior Researcher, CASE, BSC

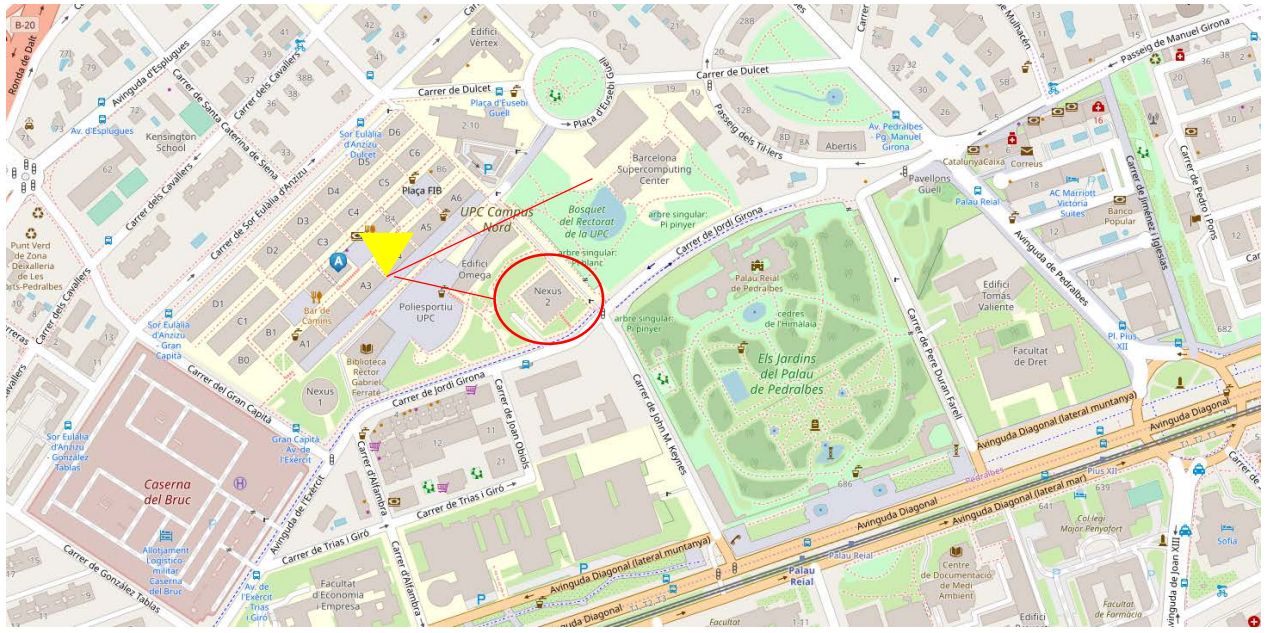
12:35h *Seeking further efficiency and scalability by standing on the shoulders of performance analysis.* **POP Marta Garcia**, Best practices for Performance and Programmability Activity Leader, Computer Sciences Dept., BSC

13:05h *Exascale-enabling technologies for Engineering Applications.* **EXCELLERAT Daniel Mira**, Senior Researcher, CASE, BSC

13:25h *Q&A*

13:45h *Closing*

REGISTER AT: <http://www.res.es/eventos/HPIConference>



 **Aula Màster UPC**