Objectives

The objective of this course is to give a panorama on the use of hpc-based computational mechanics in Engineering and Environment through the projects BSC are carrying on. This panorama includes the basics of what is behind the main tools: computational mechanics and parallelization. The training is delivered in collaboration with the center of excellence CompBioMed.

Please bring your own laptop for the practical sessions.

A number of fixed amount travel grants will be offered to a selected number of participants for covering part of their travelling expenses.

To learn about how to apply to a CompBioMed travel grant please go to Further information.

Requirements

Level: All courses are designed for specialists with at least 1st cycle degree or similar background experience

Learning Outcomes

The course gives a wide perspective and the latest trends of how HPC helps in industrial, clinical and research applications allowing to achieve more realistic multiphysics simulations. In addition, the student has the opportunity of running Jobs in Marenostrum supercomputer.
Academic Staff

Course Convener: Mariano Vazquez and Ruth Aris

Lecturers: Mariano Vázquez (BSC), Marco Verdicchio (SURFsara), Okba Hamitou (Bull), Gábor Závodszky (UvA), João Damas (ACELLERA), Adrià Perez (UPF), Phil Tooley (USFD), Ricard Borrell (BSC), Jazmín Aguado-Sierra (BSC), Dr Alexander Heifetz (EVOTEC), Andrea Townsend-Nicholson (UCL), Guillermo Marín (BSC) and Paul Melis (SURFsara).

Materials

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• For further details, please contact BSC?CNS patc [at] bsc [dot] es

Further information

Sponsors:

BSC and PRACE 3IP project are funding the PATC @ BSC training events. If you want to learn more about PRACE Project, visit the website.

Contact Us:

CONTACT US for further details about MSc, PhD, Post Doc studies, exchanges and collaboration in education and training with BSC. For further details about Postgraduate Studies in UPC - Barcelona School of Informatics (FiB), visit the website.
**Recommended Accommodation:**

Please follow the link for map of some local hotels.

**CompBioMed travel grants available:**

CompBioMed travel grants are fixed-amount support grants (amount per day) to facilitate attendance at the Short course on HPC-based Computational Bio-Medicine training event in February 2019. Please check the eligibility criteria, how to apply and the terms and conditions laid out below, before applying:

**Eligibility criteria**

**Criteria**

To be eligible for a CompBioMed travel grant:
- The travel grants can only be used for the 2019 CompBioMed training event at Barcelona Supercomputing Center.
- You must be a student or early career scientist from an academic institution.
- Your research or primary research activity must align with the CompBioMed CoE field of interest.
- You must not already be funded from CompBioMed, or have received funding in the past 12 months.
- The maximum funding award is 100 EUR per day to cover accommodation and transport costs.

**Procedures**

- The proposals will be examined by the Selection Committee. If necessary, the committee may request more information from the candidates or ask the department directors to prioritize the applications.
- The resolution will be announced on February 5th 2019.

**How to apply**

To apply for a CompBioMed travel grant please:
- Complete the online course application form.
- Indicate during the application process whether you would like to be considered for a travel grant and if your attendance is dependent on the travel grant.
- Submit a short biography including your work history, a description of your current research interests. Each document should be no longer than 100 words.
- Provide a letter of support from a supervisor or a senior co-worker explaining why you should be selected for this workshop (and the travel grant).

Application period: January 25th – February 5th 2019

**Terms and conditions**

If your application is successful:
- The travel grant can only be used for the CompBioMed training event that will be held in Barcelona in February 2019.
- Travel grant is a reimbursement after the event.
- To claim the reimbursement you must send the original receipts, a completed reimbursement form, course certificate of attendance and evidence of a completed feedback survey within 6 weeks of the event.
- You are required to write a report (300-400 words, incl. 1 photo) upon your return. Your report may be published on the CompBioMed website and publicised via social media.
Apply for the grant

Barcelona Supercomputing Center - Centro Nacional de Supercomputación