

PATC Course: Programming ARM based Prototypes

Objectives

- Get a comprehensive view of the architecture of the heterogeneous ARM-based platforms deployed in the framework of the Mont-Blanc project, including ARM multicore clusters based on mobile and server technology.
- Allow attendees to compile and test scientific codes on innovative ARM-based systems with the support of Mont-Blanc experts.
- Understand and correlate performance and power consumption figures of scientific codes.

Topics:

High performance computer architecture: The architecture of several ARM-based HPC platforms, deployed and tested during the last four years of research and development within the Mont-Blanc projects will be presented.

Tools for compilation, evaluation, optimization: A complete software stack for performing scientific computing on ARM-based systems, including compilers, performance libraries and performance analysis tools will be made available.

Low-Power Solutions - Monitoring and investigation of the power consumption of scientific codes running on innovative ARM-based platforms will be possible

Requirements

Standard HPC users, with some knowledge in ARM CPU/GPU architecture (recommended, but not required).

Academic Staff

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Barcelona Supercomputing Center on behalf of the Mont-Blanc 3 consortium.

Filippo Mantovani - post-doc at the Barcelona Supercomputing Center (BSC).

Daniel Ruiz - Developer at the Barcelona Supercomputing Center (BSC).

Enrico Calore - post-doc at the University of Ferrara (Italy) and visitor at the Barcelona Supercomputing Center (BSC).

Materials

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Further information

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All PATC Courses at BSC do not charge fees.

NOTE: PLEASE BRING YOUR OWN LAPTOP.

<http://montblanc-project.eu/>

Recommended Accomodation: Please follow [the link](#) for map of some local hotels.

[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](#).

Sponsors: BSC and PRACE 4IP project are funding the PATC @ BSC training events.

If you want to learn more about PRACE Project, visit the [website](#).

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