

## **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.

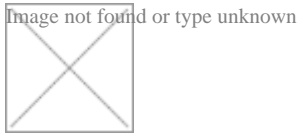
Tools for compilation, evaluation, optimization: A complete software stack for performing scientific computing on ARM-based systems, including compilers, performance libraries and performance analysis tools will be made available.

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



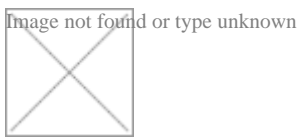
Barcelona Supercomputing Center on behalf of the Mont-Blanc 3 consortium.

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

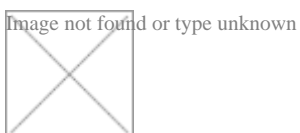
## Materials



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## Further information



**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](#).

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

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