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Subject: Announcement: ESC13 - INFN International School on "Architectures, tools and methodologies for

Posted by [Stefano Spataro](#) on Thu, 08 Aug 2013 18:10:11 GMT

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The fifth edition of the INFN International School on "Architectures, tools and methodologies for developing efficient large scale scientific computing applications - ESC13" will be held in Bertinoro (Italy) from the 20th to the 26th of October 2013.

The school is mostly targeted to PhD students, post-docs and young researchers who are actively involved with the development of scientific applications and systems. Familiarity and experience with basic concepts of modern OO languages, in particular with C++ language, are essential prerequisites to attend the school.

The program of this year is structured along two main tracks:

The basics of efficient programming:

- Impact of new processor architectures
- Floating point computation
- Tools and methodologies for improving performance
- Efficient coding
- Managing memory usage

Parallel programming in practice:

- Introduction, OpenMP programming
- GPU architectures and design patterns
- Programming GPU with directives: Open ACC and OpenMP 4.0
- Hands on introduction with CUDA and OpenCL
- Programming highly scalable systems with "MPI+X"

Lectures will be interspersed with tutorial and practical sessions, providing opportunities for direct applications of optimization tools and technologies as well as for interactions among students, lecturers and tutors.

Detailed agenda and further information to apply to ESC13 are available on the school web site <https://web2.infn.it/esc13/>

The deadline for application is: \*25 September 2013.\*

Peter Elmer  
on behalf of the International Scientific Committee

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Peter Elmer    E-mail: [Peter.Elmer@cern.ch](mailto:Peter.Elmer@cern.ch)    Phone: +41 (22) 767-4644  
Address: CERN Division PPE, Bat. 32 2C-14, CH-1211 Geneva 23, Switzerland  
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