

The eighth edition of the INFN International School on "Architectures, tools and methodologies for developing efficient large scale scientific computing applications - ESC16" will be held in Bertinoro (Italy) from the 24th to the 29th October 2016.

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 desirable prerequisites to attend the school.

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

The basics of efficient programming:

- * New processor architectures
- * Efficient floating point computation
- * Tools and methodologies for improving performance
- * Efficient exploitation of the C++ language
- * Managing memory usage

Parallel programming for scientific applications:

- * Introduction, OpenMP programming
- * GPU architectures and heterogeneous programming
- * Effective vectorization
- * Introduction to OpenCL and CUDA
- * Cluster computing

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 ESC16 are available on the school web site
<https://web.infn.it/esc16/>

The deadline for application is: *15 September 2016*.

Mauro Morandin
On behalf of the International Scientific Committee
