Tenth INFN International School on

EFFICIENT SCIENTIFIC COMPUTING

Ce.U.B. Bertinoro (Italy)
22 - 27 October 2018

"Architectures, tools and methodologies for developing efficient large scale scientific computing applications"

The basics of efficient programming:
- Modern processor architectures
- Efficient floating-point computation
- Tools and methodologies for improved performance
- Efficient exploitation of modern C++
- Managing memory usage

Parallel programming for scientific applications:
- Heterogeneous architectures
- Threading Building Blocks programming
- Effective vectorization
- GP-GPU programming with CUDA
- Cluster computing with MPI

International Scientific Committee: F. Giacomini - INFN CNAF (Chair), D. Cesini - INFN CNAF, P. Elmer - Princeton University, G. Eulisse - CERN, D. Galli - Bologna University and INFN, V. Innocente - CERN, T. G. Mattson - Intel Corp., F. Pantaleo - CERN, V. Vagnoni - INFN Bologna

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Application deadline: 16 September 2018