

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

## **EFFICIENT SCIENTIFIC COMPUTING**



Ce.U.B Bertinoro (Italy) 21 - 26 October 2019

## https://web.infn.it/esc

Application deadline: 16th September 2019

## Program

- 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
  - Programming with Threading Building Blocks
  - Effective vectorization
  - GP-GPU programming with CUDA
  - Cluster computing with MPI

