Debugging and Optimization of Scientific Applications

November 19th-21st 2018
Cineca, Casalecchio di Reno

Instructors: A. Emerson, A. Marani, E. Pascolo

November 19th
9.00-9.30 Registration and welcome
9.30-10.45 Fundamentals of computer architecture-1 (A. Emerson)
11.00-12.15 Fundamentals of computer architecture-2 (A. Emerson)
13.00-14.00 LUNCH
14.00-14.45 Introduction to Cineca’s HPC infrastructure (A. Marani)
14.45-17.00 Exercise: Running serial, MPI and OpenMP programs on Marconi. (A. Marani, A. Emerson)

November 20th
9.30-13.00 Compilers + serial optimisation Exercises (A. Emerson)
13.00-14.00 LUNCH
14.00-15.30 Intranode optimisation (E. Pascolo)
15.30-17.00 Exercises

November 21st
9.30-13.00 Performance Profiling + Exercises (A. Emerson)
13.00-14.00 LUNCH
14.00-17.00 Debugging, demonstration and Exercises (A. Emerson)