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)