Introduction to HPC Scientific Programming: tools and techniques

Agenda

Day 1 (3 November) [F. Affinito]

9.30 - 9.45   Registration
9.45 - 11.30   Computer architectures
11.30 – 13.00 Cache and Memory systems
14.00 - 17.30 Pipelining and profilers

Day 2 (4th November) [A. Emerson, Massimiliano Guarrasi]

9.30 - 13.00 Compilers
14.00 - 15.30 Libraries for HPC
15.30 - 17.00 Program debugging

Day 3 (5th November) [F. Affinito, A. Emerson]

Hands-on workshop (practical session)
In the final day of the course students will apply the lessons of the previous days with real-world examples. Students are invited to bring their own application codes, otherwise example applications will be provided.