

# 26<sup>th</sup> Summer School on Parallel Computing

Bologna, 15-26 May 2017

	Monday	Tuesday	Wednesday	Thursday	Friday
9.00 10.50	Introduction to HPC (AE)	Concepts of Parallel Programming (FA)	MPI Parallel Programming (MG)	Code Optimization (AE)	OpenMP programming (MC)
<b>Coffee Break</b>					
11.10 13.00	Introduction to HPC Architectures (AE)	MPI Parallel Programming (MG)	MPI Parallel Programming (MG)	Code Optimization (AE)	OpenMP programming (MC)
<b>Lunch</b>					
14.30 16.20	Software Engineering for HPC (CINI)	CINECA HPC Programming Environment (AM)	Hands-on Session: MPI collective communications	Hands-on Session: MPI collective communications	Hands-on Session: OpenMP
<b>Coffee Break</b>					
16.40 18.30	Software Engineering for HPC (CINI)	Hands-on Session: MPI Point-to-Point Communications	Hands-on Session: MPI Collective Communications	Hands-on Session: MPI Collective Communications	Hands-on Session: OpenMP

	Monday	Tuesday	Wednesday	Thursday	Friday
9.00 10.50	Debugging Techniques and Tools (AM)	Advanced features of MPI (FA)	Intel Xeon Phi Architecture (FA)	Programming techniques for heterogeneous architectures (PB)	Introduction to scientific libraries (MG)
<b>Coffee Break</b>					
11.10 13.00	Profiling Techniques and Tools (AE)	Hybrid Programming: MPI+OpenMP (FA)	Intel Xeon Phi Vectorisation Techniques (FA)	MPI for Python (MC, NS)	HPC and Data Analytics (RZ)
<b>Lunch</b>					
14.30 16.20	Hands-on Session: Debugging and Profiling	Hands-on Session: OpenMP	Hands-on Session: Code Hybridization MPI+OpenMP	Hands-on Session: Code Hybridization MPI+OpenMP	FREE
16.40 18.30	Hands-on Session: Debugging and Profiling	Hands-on Session: OpenMP	Hands-on Session: Code Hybridization MPI+OpenMP	Hands-on Session: Code Hybridization MPI+OpenMP	FREE

GE=Giovanni Erbacci, MG=Massimiliano Guarrasi, FA=Fabio Affinito, AE=Andrew Emerson, AM=Alessandro Marani, PB=Pietro Bonfà, RZ=Riccardo Zanella, MC=Mirko Cestari, NS=Nicola Spallanzani CINI= Consorzio CINI (Consorzio interuniversitario Nazionale per l'Informatica)

## Hands-on:

Alessandro Marani and User Support Team