

Debugging and Optimization of Scientific Applications

13th-15th March 2024

Aula:

Lingua: Inglese

Docenti: A. Emerson, F. Affinito, D. Molinari, L. Bellentani, S. Orlandini, F. Tesser, C. Latini,

Agenda

13 March - Wednesday		
9.30 - 9.45	Presentations	
9.45 - 10.45	Introduction to HPC	Emerson
11.15 - 12.30	Microarchitectures	Affinito
LUNCH		
14.00 - 15.30	Compilers and optimization	Emerson
16.00 - 16.45	CINECA HPC environment	Molinari
16.45 - 17.30	Profiling serial applications with VTUNE	Bellentani

14 March - Thursday		
9.00 - 9.45	Fundamentals of profiling	Bellentani
10.00 - 11.30	Profiling parallel programs on CPU	Bellentani
11.45-12.30	Introduction to GPU architectures	Orlandini
LUNCH		
14.00 - 15.30	Profiling accelerated codes on GPUs	Bellentani
16.00 - 18.00	Debugging CUDA applications	Orlandini

15 March - Friday		
9.00 - 10.30	Profiling multi-GPUs	Bellentani
11.00 - 12.30	Introduction to performance and energy monitoring with COUNTDOWN	Tesser
LUNCH		
14.00 - 15.30	Debugging techniques	Latini
16.00 - 17.30	Debugging MPI programs with Totalview	Latini