

# CINECA Summer School on Parallel Computing

4<sup>th</sup>-15<sup>th</sup> July 2022

	<b>Monday-4</b>	<b>Tuesday-5</b>	<b>Wednesday-6</b>	<b>Thursday-7</b>	<b>Friday-8</b>
<b>9.00</b> <b>10.30</b>	Introduction to HPC - I (AE)	Code Optimisation (AE,AP)	MPI Parallel-1 Programming (AE,LQ, AP)	MPI Parallel-2 Programming (AE, LQ, AP)	OpenMP (NS, FP)
<b>Break</b>					
<b>11.00</b> <b>12.30</b>	Introduction to HPC - 2 (AE)	Hands On	Hands On	Hands-on	Hands-on
<b>Lunch (1h.30)</b>					
<b>14.00</b> <b>15.30</b>	CINECA HPC Programming Environment (AM)	Code Optimization (AE,AP)	MPI Parallel-1 Programming	MPI Parallel-2 Programming (LQ,AE)	OpenMP (NS, FP)
<b>Break</b>					
<b>16.00</b> <b>17.30</b>	Hands-on	Hands-on	Hands-on	Hands-on	Hands-on Session:

	<b>Monday-11</b>	<b>Tuesday-12</b>	<b>Wednesday-13</b>	<b>Thursday-14</b>	<b>Friday-15</b>
<b>9.00</b> <b>10.30</b>	Hybrid Programming: MPI+OpenMP ( PL)	Programming GPUs with CUDA (LQ,NS)	Programming with GPUs directives (NS, LB)	Introduction to Quantum Computing (RM)	Profiling and performance tuning (LB, NS)
<b>Break</b>					
<b>11.00</b> <b>12.30</b>	Hands-on	Hands-on	Hands-on	QC	
<b>Lunch (1h 30)</b>					
<b>14.00</b> <b>15.30</b>	Hybrid Programming	Programming GPUs (CUDA)	Programming with GPUs directives (NS, LB)	Profiling and performance tuning (LB, NS)	FREE
<b>Break</b>					
<b>16.00</b> <b>17.30</b>	Hands-on	Hands-on	Hands-on	Hands-on	FREE

Andrew Emerson (AE) , Alessandro Marani (AM), Lara Querciagrossa (LQ), Nitin Shukla (NS), Fabio Pitari (FP), Riccardo Mengoni (RM), Piero Lanucara (PL), Laura Bellentani (LB), Andrea Piserchia (AP), Maurizio Cremonesi (MC)