



National Supercomputing
Mission



Jawaharlal Nehru
University



Centre for Development
of Advanced Computing

Workshop on High-Performance Computing at JNU

19th – 30th April 2021 (2 Weeks, 3 Days a Week, Mon-Wed-Fri)

Day	Theory (10:00 hrs –13:00 hrs)	Lab Sessions (14:00 hrs – 17:00 hrs)	Instructor
19th April	a. HPC Overview	Linux Programming	Shweta Das
	b. Linux Introduction		Shubham Mehta
21st April	a. Fundamental Concepts of Parallel Computing	OpenMP Programming	Shweta Das
	b. OpenMP Programming		Samir & Vishal
	c. Basics of Job Schedulers		Samir
23rd April	a. Introduction to MPI Programming (Point to Point)	MPI Programming	Om & Suyash
	b. MPI Programming (collective communication)		Sandeep
26th April	a. Performance metrics and parallel approaches	Application installation and benchmarking	Harshal
	b. Demo of Quantum espresso application installation, module file creation, benchmarking with SLURM script		Atharv
	c. Demo of Gromacs application installation, module file creation, benchmarking with SLURM script		Rohit
28th April	Intel Application PerformanceSnapshot (APS), Intel Advisor, Intel v-tune	Intel Tools	Intel Resource Person
30th April	CUDA Programming	CUDA Tools	Nvidia Resource Person