Program for HPC-9

5-7th Aban, 1394

Farmanieh Bldg., IPM, Tehran, Iran.

	9.00-10.30	10.30-11.00	11.00-12.30	12.30-14.00	14.00-15.30	15.30-16.00	16.00-17.30
Tues	Introduction to Grid computing	Break	Workshop 1	Lunch	Workshop 2	Break	Workshop 3
Weds	Cuda Memories and Performance		Workshop 4		Workshop 5		Workshop 6
Thurs	Finalizing Cuda		Workshop 7		Workshop 8		Workshop 9

Program Details:

Introduction to Grid computing: what is grid, how to submit a job.

Workshop 1-3: Introductory lessons on Cuda computing. Cuda threads and Cuda memories. In these workshops, we work on a matrix multiplication code and its parallelization using Cuda. If possible, Jobs have to submitted via grid .

Cuda Memories and Performance: Memory hierarchy and its effects on parallel performance.

Workshop 4: participants will work on their matrix multiplication code to improve its performance using what was presented in theory session 2.

Workshop 5-6: In this afternoon, participants will separated into two groups, one include those could not finish workshop 4 and so works on matrix multiplication code, and the seconds which have already finished their duties and are able to start working on parallelization of a simple code.

Finalizing cuda and giving some introduction to OpenCl.

Workshop7-9: Participants who have finished their previous jobs, can start working on a hard/moderate code to make it parallel. The rest of them can work on what they have to do in previous sessions.