

## Indian Institute of Technology Madras High Performance Computing (HPC) Workshop

Dates of the workshop: 27<sup>th</sup> – 29<sup>th</sup> July 2020

**Online event:** 

**Registration link** 

or scan to register:



## **Organizers:**

Himanshu Goyal (CHE), Kameswararao Anupindi (ME), Ratnakumar Annabattula (ME), Rupesh Nasre (CSE), Santanu Ghosh (AE), Sunetra Sarkar (AE) IIT Madras is organizing an HPC Workshop, from 27<sup>th</sup> to 29<sup>th</sup> July 2020, primarily for its students, staff, employees as well as for personnel from IITM research park. The workshop would include a basic HPC session, and several research talks that are expected to address a wider audience.

## Registration

Registration is free but mandatory. More details would be sent to the registered participants. Please <u>register for the workshop here</u>.

## **Program**

The event is scheduled on-line. E-meeting details will be mailed to the participants at the e-mail id filled in the registration form. The schedule of the program is as follows:

Time Speaker and Tonic

Date	Time	Speaker and Topic
27 <sup>th</sup> July	10:00	Prof. Kameswararao Anupindi (ME)
		Introduction to MPI Programming
	14:30	Prof. Krishna Nandivada V (CSE)
		Introduction to (efficient) OpenMP Programming
	16:00	Prof. Rupesh Nasre (CSE)
		Introduction to GPU Programming
28 <sup>th</sup> July	10:00	Prof. Jithin John Varghese (CHE)
		Computational Catalysis and Multiscale Modelling
	11:00	Prof. Srinivasa Chakravarthy (BT)
		Simplifying the brain: A vision for Neuroscience Research
	15:00	Prof. Nagabhushana Rao Vadlamani (AE)
		High-Fidelity Simulations in Turbomachines using distributed
		and shared memory architectures
	16:00	Prof. Narasimhan Swaminathan (ME)
		High Performance Computing in Molecular Dynamics
		Simulations
29 <sup>th</sup> July	10:00	Prof. Tarak Patra (CHE)
		Accelerating Inverse Materials Design via Gaming AI and
		High-Performance Computing.
	11:00	Prof. Chakravarthy Balaji (ME)
		Numerical simulations of extreme rainfall event in December
		2015 over Chennai under Pseudo Global Warming Conditions
	15:00	Prof. Himanshu Goyal (CHE)
		High Performance Computing for Clean Energy Technologies