



# 3 Days Hands on Workshop on GPU Computing

## An Innovative Way to Perform Scientific and High Performance Computing

September 20-22, 2017

Organized by

National Centre for Physics, Islamabad

### Introduction:

A three-days training workshop on GPU: Graphical Processing Unit/ CUDA: Compute Unified Device Architecture is being organized at NCP from September 20-22, 2017. GPUs have recently emerged as a powerful tool to run the tasks in parallel fashion to reduce the execution time of algorithms by using CUDA language. The course will be helpful for professionals and students who are planning to adopt GPU techniques for parallel computing for their projects. This course will include lectures as well as hands on lab sessions and covers the following topics:

- GPU computing, CUDA overview, GPU architecture
- CUDA threads, blocks, grids, kernel
- Memory Organization: host, device, register, constant, shared, local and global memories
- Asynchronous operations, optimization (warp, atomics)

### Participation

Applications are invited from students and researchers who are involved in scientific computing in their research projects. **PKR. 1000/-** is registration fee for participation. On successful completion of workshop certificates will be awarded to the participants. No travel grant will be given to the participants

### How to Apply

Application form is available at <http://www.ncp.edu.pk/wgpu-2017.php> and should be submitted to (caad@ncp.edu.pk) not later than **August 20, 2017**. List of shortlisted / accepted applicants will be posted at NCP website and also be informed by email once the selection procedure is completed.

### For further Information, Please Contact:

Activity Secretariat: [caad@ncp.edu.pk](mailto:caad@ncp.edu.pk)

**Manager (Scientific Event Management)**

**Collaborations & Academic Activities Department (CAAD)**

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### Organizing Committee

Hassan Shahzad (NCP)

Fawad Saeed (NCP)

Saqib Haleem (NCP)

### Workshop Coordinator

Hassan Shahzad

Email:

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Tel. 051-2077322

### Workshop Timing

**0900 – 1230**

Registration will start at  
0830 – 0900 on first day

**Application  
Deadline**

**August 20, 2017**