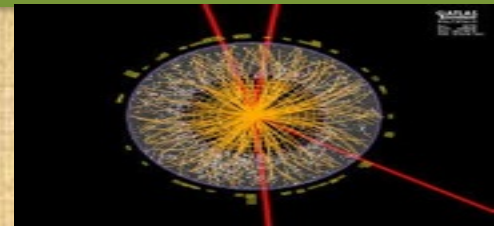




Xth SERC SCHOOL ON EXPERIMENTAL HIGH ENERGY PHYSICS



19th April - 9th May, 2016



Sponsored by:

Science & Engineering Research Board (SERB)
Department of Science & Technology (DST)
New Delhi, India

Organised by:

Department of Physics and Astrophysics
University of Delhi
Delhi, India

About SERC School

The objective of the school is to provide an understanding of different aspects of experimental high energy physics. During the school, there will be lectures on the concepts of particle and nuclear physics, accelerator technologies, detector physics, readout electronics & trigger system and data analysis techniques. Experts from all over the country and abroad will be delivering these lectures, conducting the tutorial sessions and hand on sessions on the detectors, electronics and data analysis.

Program

1. Standard Model and beyond
2. Neutrino Physics
3. Flavour Physics
4. Quark Gluon Plasma & Lattice QCD
5. Relativistic Kinematics
6. Detector Physics – Techniques and working principle
7. DAQ, Trigger, Electronics
8. Accelerator
9. Statistical Methods & Error Analysis
10. Societal Applications

Tutorial/discussion sessions will cover the problem solving and doubt clearance. In addition to above, there will be few evening lectures. Some of the scientists/experts could be invited for the special lectures.

Computer Session

1. GEANT4 – Basics and some applications
2. MC methods – For eg. Random number generation, Markov chain, etc.
3. ROOT & Data Analysis Techniques – Likelihood, MVA, NN, etc.
4. Collider Physics simulation, event generation

Experiments

There will be a total of eight experiments. Each participant is expected to perform at least 4 experiments.

National Program Committee

Prof. Kajari Majumdar, TIFR
Prof. Sukalyan Chattopadhyay, SINP
Prof. Lalit Pant, BARC
Prof. Gobinda Majumdar, TIFR
Prof. Bedangadas Mohanty, NISER
Prof. Prafulla Behera, IITM
Prof. Md. Naimuddin, DU
Dr. Amitava Roy, DST

Local Organising Committee

Prof. Md. Naimuddin
Prof. Kirti Ranjan
Prof. Ashutosh Bhardwaj
Prof. Ashok Kumar
Prof. Sanjeev Kumar Verma

Participation and Funding

Applications are invited from research scholars, post-doctoral fellows, young faculty members from institutions, universities, colleges and young researchers from R&D centres with experience in relevant area for participation in the school. A few bright and research motivated final year students of M.Sc./M.Tech. may also be selected.

The total number of participants in the school is restricted to about forty. All the participants will be provided to-and-fro AC train (or bus) fare, free lodging and boarding.

Whom to Apply

Interested candidates shall apply online at <http://duhep.in/sercehep2015/registration.php> and arrange to have a letter of recommendation from their supervisor, sent directly to **Dr. Md. Naimuddin, School Director** by electronic mail at du.ehep.serc2016@gmail.com or by post so as to reach before 10th December, 2015. The selected candidates will be informed by the end of 5th January, 2016 and they can confirm the participation by 12th January, 2016.

For more information and registration for the school please visit:

<http://duhep.in/sercehep2015/index.php>