



One Week Online High-End Workshop (Karyashala) on Software Tools and Techniques used in EHEP and its Applications

July 12 - 19, 2021



Objective

Department of Physics in collaboration with Department of ECE, MNIT Jaipur is organising a one week online High-End Workshop (Karyashala) on "Software Tools and Techniques used in EHEP and its Applications" (Under Accelerate Vigyan Scheme of SERB) from July 12 to 19, 2021. The aim of this workshop is to introduce the particle identification techniques, tracking methods, software tools and State-of-the-Art Machine learning data analysis techniques used in Particle Physics. This workshop is specially designed to improve the research skills of M.Sc./M.Tech. and Ph.D. students, who are working in the field of Experimental High Energy Physics.

Eligibility Criteria

- Ph.D. students working in the area of Experimental High Energy Physics affiliated to universities, colleges, and private academic institutions. A few bright and research motivated final year students of M.Sc./M.Tech. with specialization in Nuclear & Particle Physics will also be selected.
- Pre-requisites: Basic knowledge of
 1. Particle Physics
 2. Matter particle interaction
 3. C++ Programming language

Organizing Committee

Patron

Prof. Udaykumar R. Yaragatti
Director, MNIT Jaipur

Chair(s)

Dr. Rahul Singhal
Head, Department of Physics
Prof. Vijay Janyani
Head, Department of ECE

Convener

Dr. Kavita Lalwani (Physics)

Coordinator

Dr. Sarthak Singhal (ECE)

Local Organizing Committee

Dr. Rajendra Mitharwal, MNIT Jaipur
Dr. Kuldeep Singh, MNIT Jaipur
Dr. Rajesh Saha, MNIT Jaipur
Dr. Srinivasa Rao Nelamarri, MNIT Jaipur
Dr. K Venkataratnam Kamma, MNIT Jaipur
Dr. Anees Ahmad, MNIT Jaipur

National Advisory Committee

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Prof. Bedangadas Mohanty, NISER, Bhubaneswar
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Prof. D. Boolchandani, MNIT Jaipur
Dr. Rajeev Agrawal, MNIT Jaipur

Registration Procedure

1. Register at <https://forms.gle/rqNyAbWyqzsmmpca8>
2. Applicants (M.Sc./M.Tech. and Ph.D. students) need to upload:
 - (a) A letter of authentication from their Supervisor/ Head of the Department/Head of the Institute indicating their association with the institute and "No Objection Certificate (NOC)" for allowing their student to undergo training in the workshop, if selected (Format is enclosed in registration form).
 - (b) One recommendation letter from Supervisor

Last date of online registration: June 25, 2021
Intimation to selected participants (via email): June 30, 2021

Topics

1. Standard Model and beyond
2. Neutrino Physics
3. Flavour Physics
4. Quark Gluon Plasma
5. Dark Matter
6. Relativistic Kinematics
7. Modern Detectors and its technology.
8. Accelerator
9. Monte Carlo Simulation, Machine Learning
10. Statistical Methods & Error Analysis
11. Physics studies at EHEP Facilities

Three sessions (one hour each) every day

Contact Details

For any information, please contact @
Email: ehp2021.karyashala@gmail.com