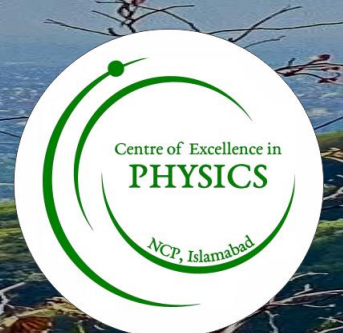




15th School on LHC Physics

August 17-28, 2026

Experimental High Energy Physics, CoE Physics
National Centre for Physics, Islamabad



Introduction

The Experimental High Energy Physics Directorate (EHEPD) at the National Centre for Physics (NCP), Islamabad will host the 15th School on LHC Physics. The event brings together students, researchers, and professionals in high-energy physics, with more than 100 participants expected from universities, research institutions, and industry.

The school will provide participants with a comprehensive introduction to experimental high-energy physics, data science, modern tools and techniques used to analyze data from the Large Hadron Collider (LHC), including advanced detector technologies and the application of artificial intelligence to explore the fundamental structure of the universe.

Main Topics

- The Standard Model and new physics
- Top quark, Higgs boson, and electroweak physics
- SUSY, dark matter, and long-lived particles
- Object reconstruction and data acquisition
- Particle detectors and new technologies
- Big data and machine learning
- Statistical methods for data analysis

Special Activities

- CMS Posters Exhibition
- CMS virtual visit
- Students Posters Presentations
- Live Demonstration: Developing Silicon Detectors
- EHEP Labs visit

Popular Talks

- Discoveries at Hadron Colliders - Celebrating CERN 70th Anniversary
- Legacy of the CMS Experiment
- Dark Matter and Dark Energy
- The Rise of Machine Learning and Agentic AI in High-Energy Physics

Participation

The graduate/undergraduate students, faculty members, scientists, engineers from universities and R&D organizations are encouraged to apply.

Registration Fee

Students Local: 3000 PKR

Students Outstation: 5000 PKR

Employees/Professionals Local: 5000 PKR

Employees/Professionals Outstation: 10000 PKR

APPLICATION DEADLINE:
July 05, 2026

Directors

Qaisar Ahsan (NCP, Pakistan)

Muhammad Aftab Rafiq (NCP, Pakistan)

Ashfaq Ahmad (NCP, Pakistan)

Roberto Tenchini (Pisa, Italy)

Advisory Committee

Thomas Muller (KIT, Germany)

Mehar Ali Shah (UIA, Mexico)

Shahzad Ali (CSU, USA)

Faisal Akram (CHEP, Pakistan)

Tentative Speakers

Shaukat Hameed Khan (Pakistan)

Asghar Qadir (Pakistan)

Roberto Tenchini (Pisa, Italy)

Thomas Muller (KIT, Germany)

Bruce Mellado (IHEP/CAS, China)

Adnan Bashir (University of Huelva, Spain)

Jan Eysermans (MIT, USA)

Shimaa AbuZeid – (INFN, Italy & ASU, Egypt)

Phat Srimanobh (Chulalongkorn, Thailand)

Henning Kirschenmann (Helsinki, Finland)

Bilal Masud (CHEP, Pakistan)

Ashfaq Ahmad (NCP, Pakistan)

Faisal Akram (CHEP, Pakistan)

Jamil Aslam (QAU, Pakistan)

Wajid Ali Khan (NCP, Pakistan)

Saleh Muhammad (NCP, Pakistan)

Imran Malik Awan (NCP, Pakistan)

M. Irfan Asghar (NCP, Pakistan)

Scientific Committee

Saleh Muhammad

Wajid Ali Khan

Imran Malik Awan

Muhammad Irfan Asghar

Administrative Committee

Muhammad Kamran Saadat

Malik Zia-ud-Din Kasi

Ali Ahmad

Tanzeel Murtaza

The online application form is available at the School

website <http://www.ncp.edu.pk/slp-2026.php>