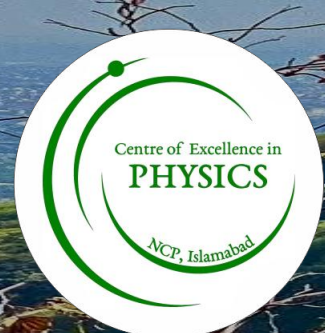




# 15<sup>th</sup> School on LHC Physics

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, accelerator physics, and data science. It will cover 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

- Accelerators and Collider Physics
- Big data and machine learning
- Statistical methods for data analysis
- 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

## Special Activities

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

## Popular Talks

- Future Prospects of Particle Physics
- 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:  
June 20, 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)  
Meher Ali Shah (UIA, Mexico)  
Shahzad Ali (CSU, USA)  
Faisal Akram (CHEP, Pakistan)

## Tentative Speakers

Roberto Tenchini (Pisa, Italy)  
Thomas Muller (KIT, Germany)  
Bruce Mellado (IHEP/CAS, China)  
Adnan Bashir (University of Huelva, Spain)  
Jan Eysermans (MIT, USA)  
Roger Barlow (UoH, UK)  
Shimaa Abdelwahed Abuzeid (CERN, Switzerland)  
Jonathan R. Ellis (Kings College, UK)  
Phat Srimanobh (Chulalongkorn, Thailand)  
Juliette Alimena (DESY, Germany)  
Henning Kirschenmann (Helsinki, Finland)  
Federica Maria Simone (INFN, Bari)  
Bilal Masood (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>