Advances in Theoretical High Energy Physics

National Centre for Physics, Islamabad

26 - 30 January, 2026 Organized by Centre of Excellence (CoE) Physics

Centre of Excellence in PHYSICS

Introduction

The Theoretical Physics Directorate (TPD) at the National Centre for Physics (NCP), Islamabad is pleased to announce the international school on **Advances in Theoretical High Energy Physics**, scheduled from **January 26** - **30**, **2026**. The school will feature a focused series of lectures by leading international theorists, covering topics at the frontier of high energy theory. Through in-depth lectures by leading international experts, participants will engage with the theoretical frameworks that underpin our understanding of nature at its most fundamental level. The school will be focused on the following critical areas in high energy theory:

- Physics of the Standard Model and Beyond
- Quantum Chromodynamics (QCD)
- Quark-Gluon Plasma and Heavy Ion Collisions
- QCD Effective Kinetic Theory
- Effective Field Theories
- Flavor Physics and Rare Decays
- General Relativity and Cosmology

Participation

The school is open to advanced undergraduate and graduate students, early postdoctoral researchers, and faculty members with an interest in theoretical high energy physics. Applicants must have completed at least three years of full-time university education by the start of the school.

Registration Fee

- Rs. 2000/- (Local students)
- Rs. 4000/- (Out-stationed students)
- Rs. 5,000/- (Faculty / Researchers)

How to apply

Online application available at: http://www.ncp.edu.pk/athep-2026.php

For further Information, Please Contact:

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Directors

Prof. Ahmed Ali (DESY, Germany)
Dr. Qaisar Ahsan (NCP, Pakistan)
Dr. M. Aftab Rafiq (NCP, Pakistan)
Dr. Mohsin Siddiq (NCP, Pakistan)

Speakers (Tentative)

Ahmed Ali (DESY, Germany)
Peter Arnold (University of Virginia,
USA)

Urs Wiedemann (CERN, Switzerland) Govert Nijs (CERN, Switzerland) Jacopo Ghiglieri (SUBATECH, France) Qaisar Shafi (University of Delaware, USA)

Prof. Alexander Parkhomenko (Yugoslav, Russia) Prof. Asghar Qadir (PAS, Pakistan) Prof. Dimitry Kazakov (JINR, Russia)

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Local organizers

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Dr. Bilal Tariq (NCP)
Zeeshan Ahmad (NCP)

Application Deadline December 25, 2025