



International School on Physics & Allied Disciplines

April 14 – 18, 2025
Islamabad, Pakistan



The National Centre for Physics (NCP), Islamabad, Pakistan, The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy and The European Organization for Nuclear Research (CERN), Switzerland are jointly organizing the International School on Physics & Allied Disciplines (ISPAD) in Islamabad, Pakistan from April 14 - 18, 2025.

Introduction

The ISPAD event is organized regularly at NCP since 2009. The main idea of organizing this event is to bring together the researchers to share scientific knowledge and to provide the opportunities for international collaborations. Around 200 local students, researchers, university faculty and many foreign invited speakers and participants are expected to participate in this event.

Format

Each year, the topics (technical activities) of the school are chosen keeping in view the present and future research interests of NCP, universities and national R&D institutions. The School will consist of plenary, parallel and poster sessions as well as tutorials and structured discussions. The plenary sessions provide overviews of advances while the parallel sessions cover the recent research on the specific topics

Topics and Coordinators

A. High Energy Physics (HEP): Theory & Experiment

Phenomenology of Particles in and beyond the Standard Model, Flavor Physics, Quark Gluon Plasma, Statistical Concepts in High Energy Physics, Collider Physics, Silicon and Gaseous Detectors in High Energy Physics.

Coordinators: Dr. Waqar Ahmad (NCP), Dr. Saleh Muhammad (NCP), Dr. Wajid Ali Khan (NCP), Dr. M. Irfan Asghar (NCP), Dr. Ishtiaq Ahmad (NCP), Dr. Shahin Iqbal (NCP)

B. Applications of Accelerators in Industry (AAI)

Radioactive Ion Beams, Ion beam and Medical Accelerators and their Applications, Synchrotron Radiation, Spallation Neutron Sources & their Applications, Defects Engineering using Ion Beam, LINAC, Particle Matter Interaction, Ion Beam Analysis.

Coordinators: Mr. Turab Ali (NCP), Dr. Naveed Zafar Ali (NCP), Dr. Kashif Shahzad (NCP), Mr. Javed Hussain (NCP), Dr. Muhammad Shahid (PNRA)

C. Plasma Physics (PP): Theory & Applications

Space, Astrophysical and Basic Plasmas; Fusion Plasma; Laser Plasma; Quantum Plasma; Plasma Applications; Plasma Modeling and Simulation.

Coordinators: Dr. Ali Ahmad (NCP), Dr. Shahid Ali (NCP), Dr. Shabbir Ahmed (NCP), Dr. Waqas Masood (CIIT), Dr. Shahzad Mahmood (PINSTECH), Dr. Aman-ur-Rehman (PIEAS)

Participation

Active graduate & postgraduate students, post-doctoral researchers, faculty and research scientists are encouraged to participate. Applicants with oral or poster presentation will be preferred. Best posters will be awarded. A limited number of travel grants may be provided to the foreign participants, especially those from the developing countries of the region.

How to apply

The online registration form can be accessed at: <http://www.ncp.edu.pk/ispad-2025.php>. The application form should be submitted by **February 28, 2025** by foreign participants and **March 25, 2025** by local participants. Selection will be made by the Scientific Committee of ISPAD-2025. Foreign applicants are required to attach/provide scans of the first two relevant pages of their passports valid at least six months after the ISPAD-2025 event. These documents to be submitted through email (ispad@ncp.edu.pk) before the registration deadline.

Registration Fee

Students: Rs. 2,000/-

Professionals: Rs. 5,000/-

Selected applicants will be required to pay a registration fee via online payment. There is no registration fee for the invited speakers and foreign participants.

Accommodation for outstation participants will be provided free of cost, however meals will be provided on payment

Sponsors

- The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy
- The European Organization for Nuclear Research (CERN), Switzerland
- Pakistan Academy of Sciences (PAS), Islamabad
- Commissions on Science and Technology for Sustainable Development in the South (COMSATS), Islamabad
- Standing Committee for Scientific and Technological Cooperation (COMSTECH), Islamabad



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Directors

Dr. Qaisar Ahsan (NCP, Pakistan)
Dr. Joseph Niemela (ICTP, Italy)

Scientific Secretary

Dr. Muhammad Aftab Rafiq

Scientific Committee

Dr. Mohsin Siddiq (NCP)
Dr. Ashfaq Ahmad (NCP)
Dr. Muhammad Usman (NCP)

Advisory Committee

Dr. Atsushi Fukuyama (Japan)
Dr. Dimitri Batani (France)
Dr. Ioannis Kourakis (UAE)
Dr. Jose Tito Mendonca (Portugal)
Dr. Luca Volpe (Spain)
Dr. Naeem A. Tahir (Germany)
Dr. Stefaan Poedts (Belgium)
Dr. Syed Javaid Khurshid (Pakistan)

Key Speakers (Tentative)

High Energy Physics

Dr. Gautier Hamel de Monchenault (France)
Dr. Thomas Muller (Germany)
Dr. Urs Wiedemann (Switzerland)
Dr. Mingshui Chen (China)
Dr. Micheal Tytgat (Belgium)
Dr. Dustin Keller (USA)
Dr. Andreas Mussgiller (Germany)
Dr. Marco Ruggi (Spain)
Dr. Gabriel Wong (UK)
Dr. Adnan Bashir (Mexico)
Dr. Gvoert Hugo Nijs (Switzerland)
Dr. Zulkaida Akbar (Indonesia)

Applications of Accelerators in Industry

Mr. Natko Skukan (IAEA)
Dr. Jianrong Zeng (China)
Dr. Guinyun Kin (South Korea)
Dr. Hiroshi Yasuda (Japan)
Dr. M. Sorokin (Russia)
Dr. Ayano Makinaga (Japan)
Dr. I. H. Sarpun (Turkey)
Dr. Thomas Osipowicz (Singapore)

Plasma Physics

Dr. Atsushi Fukuyama (Japan)
Dr. Sharmin Sultana (Bangladesh)
Dr. Muhammad Nur (Indonesia)
Dr. Dimitri Batani (France)
Dr. Stefaan Poedts (Belgium)
Dr. Ioannis Kourakis (UAE)
Dr. Bengt Eliasson (UK)
Dr. Chao Shen (China)
Dr. Zhandos Moldabekov (Germany)
Dr. Naeem Tahir (Germany)
Dr. Luca Volpe (Spain)
Dr. Martin Storey (Australia)

Organizing Committee

Dr. Muhammad Usman
Mr. Waheed Mumtaz
Mr. Kashif Sarfraz
Dr. Tanzeel Murtaza

Application Deadline

Feb 28, 2025

For Foreign Participants

March 25, 2025

For Local Participants

Further Information

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