



National Centre for Physics

Islamabad, Pakistan

International Scientific School

March 13-17, 2017



The National Center for Physics (NCP), Islamabad, Pakistan and The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy are jointly organizing the International Scientific School (ISS) in Islamabad, Pakistan from March 13 - 17, 2017. The ISS-2017 will be directed by H. R. Hoorani (NCP) and J. Niemela (ICTP).

Introduction

International Scientific Spring (ISS) which was held for the first time in 2009, has become a major regular annual scientific activity of NCP. Since 2012, The Abdus Salam International Centre for Theoretical Physics (ICTP), Italy has become a partner of NCP for organizing this scientific event in Islamabad, Pakistan. During the ISS-2016 it was agreed to rename the activity as **International Scientific School (ISS)**. The idea of holding the ISS at NCP is to provide a platform for the local and the foreign participants to exchange scientific knowledge and to generate enthusiasm for science and discovery. Around three hundred young Pakistani M.Phil/Ph.D students, researchers, university faculty and many foreign invited speakers and participants take part in the deliberations of ISS.

Format

Each year, the topics (technical activities) of ISS are chosen keeping in view the present and future research interests of NCP, universities and national R&D institutions in Pakistan. The ISS consists of plenary and parallel sessions as well as tutorials and structured discussions relevant to various technical activities in the chosen topics. The plenary lectures contain mostly overviews of advances in the chosen areas for general audience while the lectures/talks in parallel sessions cover the recent research on the specific topics.

Topics and Coordinators

A. Condensed Matter and Nano Sciences

Modern materials from both theoretical and experimental perspectives: Electronic, thermal and atomic transport and magnetism in lower dimensional systems; Functionalized nanostructures: their synthesis and nanoscale characterization

Coordinators: Sara Qaisar, Javed Akhter and G. H. Jaffary

B. Particle Physics & Cosmology

Phenomenology of elementary particles, Flavor physics, B-meson physics, Neutrino physics, Inflation gravity waves, Black hole physics, Dark matter, Si detectors in particle physics

Coordinators: Ashfaq Ahmad, Rizwan Khalid, Jamil Aslam

Participation

Active graduate & post graduate students, post-doctoral researchers, faculty and research scientists who have also published research work in recognized international journals during the last three years will be encouraged to participate (oral or poster presentation). Local hospitality will be provided to the participants. As a rule, travel expenses of the participants should be borne by their home institutes. However, partial travel assistance may be provided to selected local participants residing outside Islamabad. A few travel grants may also be provided to the foreign participants, especially those from the developing countries in the region.

How to apply

Online Registration Form can be accessed at: <http://www.ncp.edu.pk:8080/CAAD/>. Application Form should be submitted by **30th November, 2016 for foreign participants** and by **31st December, 2016 for local participants**. Selection will be made by the Technical Committee of ISS-2017. Foreign applicants are required to attach/provide first two relevant pages of their passport valid up to at least six months after the ISS-2017 event. These documents may be submitted to the activity secretariat by email or fax before the deadline for registration. Selected applicants will be required to pay registration fee (employed person: Rs. 2000/- students: Rs. 1500/-). There is no registration fee for invited speakers and foreign participants.

Sponsors

- Commission on Science and Technology for Sustainable Development in the South (COMSATS)
- Organization of Islamic Cooperation's (OIC) Standing Committee on Scientific and Technological Cooperation (COMSTECH)

For further information, Please Contact:

Activity Secretariat: caad@ncp.edu.pk

Collaborations & Academic Activities Department (CAAD)

National Centre for Physics, QAU Campus, Shahdra Valley Road, Islamabad, Pakistan

Tel: +92-51-2077363, Fax: +92-51-2077342

Website: www.ncp.edu.pk



Directors

Hafeez R. Hoorani (NCP, Pakistan)

Joseph Niemela (ICTP, Italy)

International Advisory Committee

Alessandro Baraldi (Italy)

Tallat Rehman (USA)

Joe Butler (USA)

Reza Asgari (Iran)

Key Speakers

Thomas Meredith Brown (Italy)

Bjorgvin Hjorvarsson (Sweden)

Kemal Celebi (Turkey)

Mehrdad Atabak (Germany)

Zhanpeng Wu (China)

Rachid Mazini (Switzerland)

Albert De Roeck (Switzerland)

Marilena Teresa Loverde (USA)

Mojtaba Mohammadi Najafabadi (Iran)

Akram Khan (Pakistan/UK)

Naureen Ghafoor (Pakistan/Sweden)

Silvia Costantini (Italy)

Scientific Secretary

S. Khurshid Hasanain (NCP)

**Application
Deadline**

Nov. 30, 2016

For Foreign Participants

Dec. 31, 2016

For Local Participants