

XXII DAE-BRNS High Energy Physics Symposium

December 12 – 16, 2016



Supported by:
**Board of Research in Nuclear
Sciences (BRNS),
Department of Atomic
Energy (DAE), India**



Organized by:
University of Delhi

Convener

Md. Naimuddin

Joint Convener

Kirti Ranjan

**Department of Physics & Astrophysics
University of Delhi, Delhi 110007**

About the conference

The DAE-BRNS High Energy Physics (HEP) Symposium is a conference series held every other year in India, supported by the Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy (DAE), India. The DAE - HEP symposium is the premiere event organized in the field of High Energy Physics and covers almost all aspects relevant to Particle Physics. The next series of the symposium will be held at University of Delhi. Around 300 delegates from all over India and abroad are expected to participate in this symposium. The deliberations and discussions are expected from theoretical and experiment areas covering variety of physics topics in particle physics, viz. neutrino, flavour, heavy ion, astroparticle, physics beyond Standard Model, societal applications etc. The symposium will consist of parallel and invited plenary sessions. A poster session will also be held to provide an opportunity to the young researchers to showcase their research.

The XXII edition of the DAE-BRNS High Energy Physics Symposium will be held at Delhi University (DU) during December 12 – 16, 2016.

Topics include theoretical and experimental works on

1. Neutrino Physics
2. Standard Model Physics (including Electroweak, flavour physics)
3. Beyond Standard Model Physics
4. Heavy Ion Physics & QCD
5. Particle Astrophysics & Cosmology
6. Future Experiments and Detector

development

7. Formal Theory

8. Societal Applications: Medical Physics, Imaging, etc.

National Organizing Committee

1. Md. Naimuddin, DU, Delhi (Convenor)

2. Kirti Ranjan, DU, Delhi (Jt. Convenor)

3. Gagan Mohanty, TIFR, Mumbai (DAE Contact)

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11. Manjit Kaur, PU, Chandigarh

12. Subhasis Chattopadhyay, VECC, Kolkata

13. Bedangadas Mohanty, NISER, Bhubneswar

14. Namit Mahajan, PRL, Ahmedabad

15. Debashish Ghosal, JNU, New Delhi

16. Ajit Mohanty, BARC, Mumbai

17. Anju Bhasin, Jammu Univ., Jammu

18. Nita Sinha, IMSc, Chennai

Local Organizing Committee

1. Amitabh Mukherjee, DU

2. Sanjay Jain, DU

3. Brajesh Chaudhuri, DU

4. Debajyoti Choudhury, DU

5. Kirti Ranjan, DU

6. Md. Naimuddin, DU

7. Ashok Kumar, DU

8. Ashutosh Bhardwaj, DU

9. Sukanta Dutta, DU

10. Sanjeev Kumar Verma, DU

Venue

The workshop will be held at the Conference Centre of University of Delhi, North Campus, Delhi – 110 007. The Conference Centre has a large air-conditioned conference hall and few smaller rooms for the parallel sessions. The Conference Centre is located near gate no. 4 of the university north campus, opposite Botany department, and is surrounded by beautiful green ambience.

University of Delhi

The University of Delhi was established in 1922. It is one of the premier Educational Institution in India. Sixteen faculties of the University offer a wide spectrum of undergraduate, postgraduate and doctoral programs. With its 85 colleges, 84 postgraduate departments, over 300,000 students and about 7,000 teachers, the University of Delhi is the largest in India and one among the largest in the world. North Campus of University of Delhi is located in the northern part of Delhi, near Delhi University Metro (subway) Station. It is approximately 40 km from Indira Gandhi International Airport and about 30 km from domestic terminal.

Department of Physics & Astrophysics

The Department of Physics and Astrophysics, University of Delhi, is located in the picturesque and historic North Campus of the University. Spread across three buildings and with over 800 members, it is possibly the largest science department in any Indian university. It came into its existence in the year 1922. When the University moved to its present campus, the

Physics and Chemistry Departments were allocated space in the former Viceroy's complex, in an elegant pillared building which continues to function as the shared Old Block of the two departments. The department offers the masters and Ph.D. programs in almost all major branches of physics.

High Energy Physics Group at DU

Delhi University High Energy Physics group consists of several active members both in theoretical as well as in experimental physics. The theory effort includes particle physics, particle astrophysics and string theory. The experimental effort includes Large Hadron Collider (LHC) physics, neutrino physics, and detector R&D. The group is pursuing an exciting physics program at the TeV energy regime opened up by the LHC, which recently discovered a Higgs boson and offers the continual possibility of major new discoveries. Our group had leading roles in searches for Higgs and Top. Members of the Group exercise significant influence in many of the current and future international experiments in experimental high energy physics (EHEP). Experiments are underway at the major particle physics laboratories in India, Europe and USA. The group also have in-house silicon and gaseous detector fabrication and testing facilities. Besides, the group is also involved in the R&D of the HEP detector technology to the societal applications.

The City – Delhi

Delhi has been Capital of India under rules of different regimes/dynasties such as King Prithviraj Chauhan, Slave

Dynasty, Lodhi Dynasty, Mughals and now the Modern India except for some period during that of Emperor Akbar. Delhi has an important place in India because of its strategic position. Delhi has seen many upheavals in history during different regimes but has benefited also from all regimes at least in one way - "Historical Monuments". It has rich multicultural society embracing people from different parts of the country. Being the capital of India for several centuries, many historical monuments such as Red Fort, Old Fort, Feroz Shah Kotla, Qutab Minar, Jama Masjid, Humayun's Tomb, India Gate, etc. could be seen in and around Delhi. Also, there are many tourist attractions like Iskcon temple, Lotus temple, Akshardham temple, Gurdwara Bangla Sahib, Rashtrapati Bhawan, Lodi Gardens, Rajghat, Chattarpur temple, Birla Mandir, Dilli Haat, etc. to visit. The world wonder Taj Mahal is just 75 kms. from the Delhi and is conveniently connected through dedicated highways and fast train services. The city is just not about monuments, it is also a blend of different cultures and religions. People with different religious background such as Hindu, Muslim, Christian, Buddhist, Jain, Sikh, etc. live happily together in this city. Today's Delhi comprises of Old Delhi and New Delhi with the old heritage, colourful life and modern lifestyle. It also has the biggest marketplace in Asia.