



ACADEMIC ACTIVITIES 2018-2019

DEPARTMENT OF PHYSICS



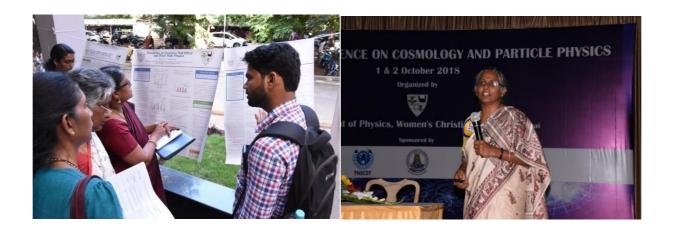
Academic activities

2018-2019

The National Conference on Cosmology and Particle Physics organized by the department of Physics, Women's Christian College on the 1st and 2nd October 2018. The event brought together more than 220 participants from almost 5 states across the nation to review the role of cosmology and particle physics in the current scenario. It provided a valuable networking opportunity and set the stage for further development in the field of cosmology. The conference began with the inaugural programme at 9 am on 1st October. The main focus of the National conference on Cosmology and Particle Physics was to cover the various topics in particle physics including physics beyond the standard model, dark matter, collider physics and early universe. The scientific program of the conference included plenary talks by pioneering physicists and presentations of research findings followed by a hands-on session where the participants were trained to simulate a couple of graduate – level experiments in Nuclear Physics and analyze the data obtained using a user-friendly software called QUIQG4. The conference paved a way to promote and establish a collaborative framework of researchers and academic partners.











Seminars organized by the Department

The inauguration of the Physics Association, Hi-Phy 2018 was organized by the department on 14th August 2018. Dr. S. Balachandran, Deputy Director General of Meteorology, Regional Meteorological Centre, Chennai, delivered a special lecture on 'Weather Forecasting'.



Dr. MADASAMY THANGAMUTHU, Scientist, Nanophotonics and Metrology Laboratory (NAM), Swiss Federal Institute of Technology Lausanne (EPFL), Lausanne – 1015. Switzerland, spoke on 'Recent Trends in Nanotechnology' on 7th September 2018. The UG & PG Physics and PG chemistry students benefitted by the special lecture.



A special lecture was organized by the department on 22nd Feb 2019. Dr. Emmanuel Haqq, Nuclear Physicist, USA, delivered the special lecture on "Limits of Physics –How Physics Points Beyond itself" at Bertha Corfield Auditorium.



The Hi-Phy, inter-collegiate fest, organized by the Physics Association on 17th December 2018 was exuberant. The Chief Dignitary of the day was Dr. J. Daniel Chellappa, Senior Scientist (TCW), Bhabha Atomic Research Centre (BARC), Government of India, Chennai. The inaugural talk was on 'Applications of Physics and Resource Management & Research and Career Options in Physics' which instilled in the audience a greater knowledge about the subject. The annual physics magazine, 'Quark' brought out by the students, was released. Intercollegiate competitions, such as debate, sci-fi writing, quiz, photography, treasure hunt, potpourri, collage, experimental physics, meme creation and numerical were conducted with eminent judges to assess the participants. The fest witnessed around 230 participants from 15 colleges all over the city. MCC shift 2 students received the overall championship.





Study Tour Report

The study tour was organized for the students of III B.Sc. Physics from 19^{th} – 22^{st} January 2019 to Cochin and Trivandrum. Students were accompanied by two faculty members of the department. On 20^{th} January, the staff and students visited a 13^{th} century church, 'The Church of Our Lady of Hope', the Lulu Mall and Bolgatty Island. On 21^{st} , the group visited Ponmudi Hills in Trivandrum.

On 22nd January, the team visited Vikram Sarabhai Space Centre (VSSC) museum, Trivandrum near the northern boundary of Thumba Equatorial Rocket Launching Station (TERLS), lined with high-tech artefacts and visuals, which speak the tell-tales on the birth of Indian Space Programme. The museum has full-scale model of PSLV and PSLV heat shield on its premises. The museum also has scaled down (one fifth in size) models of GSLV, GSLV Mk-III and ATV that made a significant contribution to India's maiden mission

to the Moon, Chandrayaan-1. The presentations made were highly informative, simple and easy to understand. A movie theatre with surround sound system, screens specially tailored movies on Indian Space Programme. Thus the study tour was very informative and beneficial to the students.









Ms. Isarya and twenty students of Non-Major Elective course Astrophysics visited B. M. Birla Planetarium in Periyar Science and Technology Centre campus, which provides a virtual tour of the night sky and holding cosmic shows on a specially perforated hemispherical aluminium inner dome. It also houses eight galleries, namely, Physical Science, Electronics and Communication, Energy, Life Science, Innovation, Transport, International Dolls and Children and Materials Science, with over 500 exhibits.

