



Physics Colloquium



Physics Department, COMSATS Institute of Information Technology, Lahore

Physics Colloquium, in each semester, has become an **identity of the Department**. Subsequent to eight successful Physics Colloquiums 9th Colloquium was organized by Physics Department, CIIT Lahore on 27 December, 2017 dedicated to **Erwin Schrödinger**. This one day activity consists of popular lectures by renowned speakers who discussed various aspects of quantum mechanics and its implications. Experts from different Universities especially, from university of the Punjab, Govt. College University, FC College University, and University of the Lahore participated in the colloquium.

Message from Director

Prof. Dr. Qaisar Abbas, Director, CIIT, Lahore, was invited as the chief guest of the event. During his address, Prof. Qaisar Abbas encouraged the departmental move to support the ideas. He further stressed upon this exchange of scientific ideas to be tested on practical grounds thus to make the spell of such debates more effective and long term.



Message from Head

The colloquium was started with the Recitation from the Holy Quran following the opening remarks from **Prof. Dr. Hafiz Ashfaq Ahmad**, who explained the objectives of the event and gave a brief introduction of the department along with the welcome address.





The first talk was delivered by **Dr. Atif Shahbaz** (GCUL) on "Mysteries of Quantum Mechanics". He introduced the basic quantum mechanics in detail in a very simple and interesting way. He explained the de Broglie wave-particle idea with experimental evidences. The talk was ended with an interesting concept of Schrodinger's cat.



Dr. Hamid Latif (FCUL) explained the Quantum Mechanics of Solar Cells. He started his talk by giving basic concepts of quantum mechanics and described quantum dot sensitized solar cells.



Dr. Zafar Iqbal (GCUL) differentiate Classical and Quantum Plasmas and gave mathematical description of spin quantum plasmas in electrostatic modes. At the end he concluded that Separate spin evolution system has revealed the existence of new waves. Spin effects appears on both electrostatic and electromaagnetic wave .



The last talk of the session was delivered by **Dr. Usman Ilyas** (UETL). This talk was prepared to give concept to students about the field of spintronics. Dr. Ilyas explained the basics of this field in a very appropriate way.

Shakra Khurshid (Assistant Director IPO Regional Office, Lahore) give a detailed Introduction to intellectual property rights. She explained different IP types like Patents, Trademarks, Copyrights, and Designs; Dr. Khurshid discussed importance of IP in universities and provided the basic information to register a patent.

*At the last moments of this one day activity, **Prof. Dr. Qaisar Abbas**, Director CIIT, Lahore inaugurated the Society for Clean and Renewable Energy Technology by cutting the Ribbon. The thematic idea of this society is to provide clean energy and clean water to the public of rural areas as well as for the societal benefits. The purpose of this society is to bring researchers, students, as well as industrial and private organizations together from all over the world for the efficient use of renewable resources. The society especially focuses the public awareness in rural areas about the conservation of energy and exploiting the renewable energy resources. COMSATS has initiated to explore this area of interest to provide energy solution, conservation and environmental protection for the country.*



Lunch and Refreshment were offered for the participants in order to boost the activity.

Event Organizing Committee
Dr. Muhammad Ashfaq Ahmad
Dr. Zahida Ehsan
Dr. Muhammad Hammad Aziz

Editor
Dr. Nosheen Akbar