Physical Research Laboratory, Ahmedabad

PUBLIC LECTURE

Speaker: **Prof. Girish S. Agarwal, F. R. S**
Noble Foundation Chair and Regents Professor, Department of Physics
Oklahoma State University, USA.

Title: **"Amazing Photons"**

Time: **Tuesday, 21 July, 2015, 17.00 hrs.**

Venue: **K. R. Ramanathan Auditorium, PRL**

Abstract

The theoretical understanding of the black body radiation led Planck to discover the quantum theory in 1900. He introduced the idea of light quanta which later were termed as photons. The 20th century saw the formulation of many new principles and laboratory confirmations of the predictions following the new ideas. As far as light is concerned the biggest invention was the discovery of the lasing principle by Townes which was based on Einstein's ideas on spontaneous and stimulated emission and today we see lasers in all walks of life. While 20th century essentially used classical technologies, the 21st century is expected to be the century where quantum and in particular single photon technologies would be at work. I will present an overview of some of these developments.

The Speaker

Prof. Girish S. Agarwal is an alumnus of Banaras Hindu University. He did his Ph.D. from the Rochester University, USA. He then returned to India and worked at TIFR before accepting an invitation to establish a School of Physics at the Central University, Hyderabad. He was the Director, PRL during 1995-2005 and has nurtured an internationally respected school of quantum optics in India over the past 30 years. He has been at the Oklahoma State University, USA since 2005 as Noble Foundation Chair and Regents Professor. Prof. Agarwal is internationally acclaimed for his contributions to Quantum Optics, Laser Physics and Statistical Mechanics. He is a recipient of the S.S. Bhatnagar Prize, the Humboldt Research Award, G.D. Birla Award, M.N. Saha birth centenary award and the Albert Einstein Professorship of the Indian National Science Academy. He is a Fellow of the Royal Society, the American Physical Society, the Optical Society of America, the Indian National Science Academy, National Academy of Sciences, Indian Academy of Sciences, and the Third World Academy of Sciences. He has published more than 500 papers in top international journals, including Review Articles and Research Monographs. He has authored a book on "Quantum Optics" which is published by Cambridge University Press.

Tea at 18:00 hrs.

ALL ARE WELCOME