CENTRE FOR LASERS & PHOTONICS
Indian Institute of Technology Kanpur

R. R. DASARI DISTINGUISHED LECTURE SERIES - 2014

“LIGO: On the Threshold of Gravitational-wave Astronomy”

By
Dr. Stanley E. Whitcomb
Chief Scientist
California Institute of Technology
LIGO Laboratory
Pasadena, CA.

Date/Time: 24TH SEPTEMBER @06:00 PM (Tea will be served at 05:45 PM)
Venue: L-4 (Lecture Hall Complex)

Abstract: The Laser Interferometer Gravitational-wave Observatory is a project to develop ultra-sensitive optical interferometers for the detection and study of gravitational waves from astrophysical sources. First detections are expected in the next few years, and they will offer new information about some of the most energetic events in our universe. The challenges of using interferometry to detect gravitational waves and how LIGO is meeting those challenges will be described. In conclusion, there will be a short discussion of the importance of international networks for extracting the full potential from gravitational wave observations.

The Speaker
Dr. Stanley E. Whitcomb is currently the Chief Scientist of the Laser Interferometer Gravitational-wave Observatory (LIGO) Laboratory. The LIGO Lab is operated by Caltech and MIT through funding from the National Science Foundation.

Dr. Ramachandra Rao Dasari was born in India in Krishna District of Andhra Pradesh. He had all his education in India receiving B.Sc. in 1954 from Andhra University, M.Sc. in 1956 from Benares Hindu University and Ph.D. in 1960 from Aligarh Muslim University. He joined the faculty of the Department of Physics at the Indian Institute of Technology Kanpur in 1962 and became a full professor in 1973. Prof. Dasari's major accomplishment at IIT Kanpur included the establishment of one of the largest Laser laboratories for university research in India. He left IIT Kanpur in 1978. After a couple of other stints, he joined MIT in 1980 as a visiting Professor of Physics. In 1981 he was appointed Principal Research Scientist in Spectroscopy Laboratory. In 1984 he was appointed as Assistant Director of the Spectroscopy Laboratory and later promoted as Associate Director in 1992. He oversees project coordination and facility developments of the National Institute of Health supported MIT Laser Biomedical Research Center and also coordinates research programs associated with the National Science Foundation supported Laser Research facility.

* The lecture will be an introductory one for both graduate and undergraduate students.*