



## ICTS COLLOQUIUM

- Title : Overview of the Upcoming Neutrino Experiments in the Next Decade
- Speaker : Brajesh Chandra Choudhary, University of Delhi, India
- Date : Friday, June 28, 2013
- Time : 10:00 a.m.
- Venue : ICTS Seminar Room-1, IISc Campus, Bangalore
- Abstract : With the discovery of neutrino oscillations, it has been established that neutrinos have mass and they mix. This is the first evidence of physics beyond the Standard Model of Particle Physics.

In this talk, I will briefly discuss the formalism of neutrino oscillation, the current status of neutrino physics, the open questions and the fundamental physics they relate to. A broad experimental program is underway and I will proceed to discuss the various experiments that are either in operation or being planned in future in various parts of the world to disentangle the neutrino mass-hierarchy, establish CP violation in the neutrino sector, measure the CP phase, and also measure the neutrino mixing parameters to a very high precision. I will also briefly discuss the experimental challenges associated with such experiments.

This colloquium will be given over video conferencing.

*(This colloquium is part of the ICTS Program on Numerical Relativity and the ICTS-IISc Joint Program)*