Physical Research Laboratory, Ahmedabad

Special Colloquium 19 - 10

Speaker: **Prof. Sivarani Thirupathi**
Associate Professor, Indian Institute of Astrophysics (IIA), Bangalore, India

Title: **"Thirty meter telescope (TMT): An overview of the science and instrumentation program"**

Time: **Tuesday, 11 June 2019, 16.00 hrs.**

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

Abstract

During the next decade three big major ground based observatories will come online. One of them is the thirty meter telescope, in which India is a one of the partners along with Caltech, UCO, Japan, Canada and China. In this talk, I will present an overview of the science capabilities of the observatory and the planned suite of instruments. I will talk about Indian "in-kind" contribution to the project. I will also discuss the opportunities for the Indian community to be part of the science planning, key science proposals and instrument development teams, also take lead roles in some the developments.

The Speaker

Prof. Sivarani Thirupati obtained her Master's degree from the American College, Madurai and PhD (Physics) from IIA & Bangalore University. She is presently a faculty at IIA. She is an observational astronomer and her main research interests are stellar spectroscopy and chemical abundances. She uses these tools to study the properties of stars, early chemical history of Milkway and nearby galaxies. She also has experience in astronomical instrumentation. She was a project manager for the Hanle Echelle SPectrograph(HESP) on the 2m Himalayan Chandra Telescope and she is also part of the instrument team for TMT wide field optical spectrograph. She uses large datasets and has developed automated data processing and analysis pipelines. She was one of the main contributors to the SDSS-SSPP pipeline and synthetic spectral template for the RV pipeline. She was recognized as an architect for the SDSS-III MARVELS survey for her significant contributions to the survey. She is a member of TMT science advisory board, convener of TMT international science development team on stars and ISM. She is member of the science team for Mauna Kea Spectroscopic Explorer (MSE). She has more than 100 scientific publications and over 10000 citations.

Tea at 15:30 hrs
ALL ARE WELCOME