



**Udaipur Solar Observatory/ Physical Research Laboratory**

**P.Box.No 198, Dewali, Badi Road, Udaipur-313001**

---

## **SEMINAR**

### **Narrow band imager for Multi Application Solar Telescope at Udaipur Solar Observatory**

**(A Raja Bayanna)**

Multi-Application Solar Telescope (MAST) is an off-axis Gregorian solar telescope of 50 cm clear aperture being installed at the lake site of Udaipur Solar Observatory (USO). A narrow band imager is being developed for near simultaneous observations of the solar atmosphere at different heights. The heart of the system is two LiNbO<sub>3</sub> Fabry-Perot (FP) etalons working in tandem. It is important to calibrate the system for a change in voltage and a change in temperature for near simultaneous observations in different wavelengths. A Littrow spectrograph was set up to calibrate the FP etalons using a 15 cm refractor as a light feed. Calibration is carried out for the solar spectral lines at Fe I 6173 Å, and Ca K 8542 Å. In this presentation we discuss the temperature and voltage tuning of the system. We also present the details of the calibration set-up and obtained parameters along with the first-light results of the system.

**Date:** Apr 26, 2013

**Time:** 16:30

**Venue:** USO Seminar Hall