



**Udaipur Solar Observatory/ Physical Research Laboratory**

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## **SEMINAR**

### **Fast Solar Polarimeter: Concept and the lab measurements**

**(Dr K. Nagaraju MPS, Lindau, Germany)**

A new polarimeter is under development at the MPS towards a goal of carrying out high precision spectropolarimetric observations on the Sun, combined with increased high spatial resolution. The polarimeter is based on pnCCD detector technology from PNSensor. The CCD detector can be operated at frame rates of up to 1000 frames/s to suppress spurious polarization signals induced by the atmospheric turbulence or instrument jitter. The polarization modulator is based on two ferro-electric liquid crystals and two static retarders. Achromatism in terms of polarimetric efficiency is achieved through appropriate positioning of the retarders. In this talk I will discuss about working principle and laboratory test results of the new polarimeter.

**Date:** May 15, 2013

**Time:** 16:00 hrs

**Venue:** USO Seminar Hall