

Astronomy & Astrophysics Division Seminar

Title : **Recent Developments in Electronic Subsystems of PARAS**

Speaker : Mr. J. S. S. V. Prasad (PRL, Ahmedabad)

Date : 07.09.2017 (Thursday)

Time : 16:00 Hrs

Venue : Seminar Room # 113/114 (Thaltej Campus)

Abstract:

PRL Advanced Radial Velocity Abu Sky Search (PARAS) is a high-resolution Spectrograph which uses radial velocity technique for detection of exoplanets. In order to reach an accuracy of Doppler shift measurements of a few meters-per-second, effective temperature regulations of the stellar spectrograph is very important. A change of 1°C in the spectrograph temperature can produce instrument shift of 100m/s due to change in refractive index in Lenses and other optical components. Hence temperature variation during the observation should be within 0.01°C to 0.005°C to get a system stability of 1m/s or better. In this talk, I will discuss about the Temperature controller of PARAS along with some recent developments in other electronics sub systems.
