

## Astronomy & Astrophysics Division Seminar

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Title : Spectral and Timing studies of Be X-ray binary pulsar 2S 1417-624

Speaker : Ms. Shivangi Gupta (PRL, Ahmedabad)

Date : 13.08.2018 (Monday)

Time : 16:00 Hrs

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

### **Abstract:**

Be/X-ray binaries are among the brightest transient X-ray sources in our Galaxy. The compact object in these systems (which is a mostly a neutron star), revolves in a wide eccentric orbit around massive Be spectral type optical companion. These sources show periodic or Type-I X-ray outbursts, usually associated with periastron passage of binary. It is believed that neutron star accretes matter from a circumstellar disk around the Be star and powers such a strong outbursts. Another kind of X-ray enhancements, Type-II outbursts are also displayed by these systems, which are quite rare and independent of the orbital phase of the binary system. These rare events provide a unique opportunity to probe the emission geometry of these binary system. In this talk I will present results obtained from the spectral and timing studies of such a source, 2S 1417-624 during a Type-II outburst in 2009, using RXTE observations.

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