Special Astronomy Seminar

August 24, 2010

Speaker : Dr. Ramesh Bhat
Swinburne University of Technology,
Australia

Title : Binary-pulsar tests of theories of gravity

Date & Time : Monday 30 August, 2010 at 16.00 hrs

Venue : TAP Seminar Room (A269)

(A. Gopakumar)

Abstract

Pulsars in close binary systems have provided the most stringent tests of strong-field gravity to date. Pulsar J1141-6545, which inhabits an eccentric 4.7-hour orbit around a solar-mass white dwarf makes a powerful laboratory for such tests due to its gravitationally asymmetric nature. In this talk, I will describe the gravitational tests derived from this system, and also comment on the future prospects and some challenges to counter in order to enable further stringent tests.