Astronomy & Astrophysics Division Seminar

Title : An Infrared study of dark cloud : LDN1340

Speaker : Ms. Archita Rai (PRL, Ahmedabad)

Date : 09.08.2018 (Thursday)

Time : 16:00 Hrs

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

Abstract:

Lynds dark nebulae (LDN) are dark patches seen against the background stars of the Milky Way. They are thought to be the birth places for stars. A catalog of these dark nebulae was made in 1960 by Beverly Turner Lynds, who visually inspected large areas of the Milky Way on the Palomar-Schmidt Survey Plates (POSS). As these regions have large opacity (range ~ 1 to 6) & extinction caused by high density and interstellar dust, the stars embedded in the dark clouds may not be visible in the optical band. To study them, infrared wavelength are expected to provide us with more penetration depth to study the core of the clouds. Hence more stars can be detected and the phenomena like polarisation and extinction which depend upon the distribution of the interstellar dust and the interstellar magnetic field can be studied in detail. In my talk, I will give a brief introduction to one of the Lynds clouds (LDN1340) and discuss its behaviour and properties. I will be discussing the observational aspects of using NICSPOL at the Mt. Abu Infrared Observatory along with other archival photometric data for this study.
