



भारतीय ताराभौतिकी संस्थान
INDIAN INSTITUTE OF ASTROPHYSICS
कोरमंगला Koramangala, बेंगलूरु Bengaluru – 560034.

स्नातक अध्ययन मंडल **Board of Graduate Studies.**

STUDENT SEMINAR
(Part of Comprehensive Examination)

Speaker: Ms. Shubhangi Jain

शीर्षक Title: Development of Subsystems for Space Astronomy Missions

सार Abstract

Astronomers have long recognized the critical need for ultraviolet imaging, photometry and spectroscopy of various sources. UV Observations has to be carried out from space to avoid absorption by Earth's atmosphere. Despite the importance of far-ultraviolet (FUV) observations, there are relatively few FUV imaging missions planned in the near future. Large and sensitive UV telescopes are often oversubscribed and they are too sensitive to cover brighter regions of the sky. We are developing a small Far-Ultraviolet Imaging telescope to cover some of the science cases that are not possible with larger sensitive telescopes. This instrument will operate in the 130-180 nm wavelength range. It has an aperture of 80mm and at 3.4U total volume, it is compact enough to be flown on a CubeSat. The small size of the payload combined with a simple design makes the development cycle faster compared to larger missions, and brings down the cost of manufacturing and launch significantly. This telescope will be launched by InterCosmos, a private space startup, on one of their upcoming missions towards the end of 2025. In this work we present the development of the imager and the science cases. In-house development of various affordable subsystems for space payloads will also be discussed.

गुरुवार Thursday 10, अक्टूबर October 2024

Time: 11:30 AM

Venue: प्रेक्षागृह Auditorium

सभी का स्वागत है All are welcome.