



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

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

Ph.D enrollment Seminar

**Speaker:** Ms. Savitha M S

**Title:** Extreme Ultraviolet Spectropolarimetry for Probing Coronal Magnetic Fields:

**सार Abstract**

Magnetic fields play a fundamental role in governing the structure and dynamics of the solar atmosphere. A reliable diagnosis of the magnetic field is essential for advancing our understanding of the dynamics in the solar atmosphere. Significant progress has been made in measuring magnetic fields in the photosphere and chromosphere using Zeeman and Hanle diagnostics of spectral lines in the visible and infrared regions. Similar techniques have been applied to probe coronal magnetic fields, but these are limited to off-limb observations. EUV spectral lines originate in the transition region and corona and are sensitive to the Hanle effect, making them suitable as weak magnetic field diagnostics. Spectropolarimetry of spectral lines in the extreme ultraviolet, therefore, provides a promising approach to probe coronal magnetic fields both on-disk and off-limb; however, no polarimeter currently exists in this wavelength range. Our work aims to design and develop an EUV polarimeter to study the coronal magnetic fields. In this talk, I will present an overview of the proposed research, including identifying a suitable EUV wavelength range, exploring appropriate coating materials, designing and developing a prototype EUV polarimetric instrument, and laboratory testing.

मंगलवार Tuesday 17, मार्च March 2026

Venue: प्रेक्षागृह Auditorium

Time: 2:00 PM

सभी का स्वागत है All are welcome