



भारतीय खगोलभौतिकी संस्थान

**INDIAN INSTITUTE OF ASTROPHYSICS**

कोरमंगला Koramangala, बेंगलूरु Bengaluru – 560034.

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

**Visiting Student's Programme Seminar**

[Science Academies Summer Research Fellowship - 2025]

**Title:** Experiments in Image Processing

**Speaker:** Mr. Adwait S. Kumar

(NIT Karnataka, Surathkal)

**सार Abstract**

This talk explores how raw astronomical data transforms into meaningful scientific imagery. Beginning with CCD detector principles and noise modeling, I shall highlight practical steps in image scaling, stacking, and calibration using tools like DS9, Siril, and GIMP. Real datasets-including lunar imaging and Supernova 2005kd-demonstrate dithering, filter usage, and RGB image construction. There will be an emphasis on both technical workflow and scientific interpretation, offering a hands-on perspective into observational astronomy.

शुक्रवार Friday 18, जुलाई July 2025

Time: 2:30 PM

प्रेक्षागृह Auditorium

सभी का स्वागत है All are welcome.