



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

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

Visiting Student's Programme Seminar

Title: Obtaining the Cosmic Energy Budget from the CMB Observation

Speaker: Ms. Dhriti Kotwal

(BSc- UM-DAE CEBS, Mumbai)

सार Abstract

The Cosmic Microwave Background (CMB) radiation we observe today is a snapshot of the universe around 380,000 years after the Big Bang. The Planck satellite has measured the variations in the brightness of the CMB across the sky with unprecedented precision. These data contain rich information about the universe. One such key information is the energy budget of the universe. In this project, we have used the CMB data from the Planck archive. In order to understand how the cosmological parameters, affect the CMB observations, we use the code CLASS and simulate the CMB angular power spectrum for different combinations of cosmological parameters. Combining the simulated outputs with the Planck data, we derive the best-fit Lambda-CDM model and hence determine the current energy budget of the universe.

सोमवार Monday 14, जुलाई July 2025

Time: 11:00 AM

प्रेक्षागृह Auditorium

सभी का स्वागत है All are welcome.