

Astronomy at BITS-Pilani

A brief presentation

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Birla Institute of Technology and Science
Pilani Campus
Department of Physics

BITS Pilani
Pilani Campus

Located in the Indian state of Rajasthan which has a rich heritage of astronomical studies dating back to the early 18th century, BITS Pilani has coincidentally imbibed this tradition of interest in the study of cosmos.

A part of this ever growing interest is concentrated in the academic research in the Department of physics and a wider and more popular interest prevailing in the campus amongst the students.





Over the last few years there has been a steady shift in the nature of this interest from purely amateurish curiosity to more serious research oriented purpose.

The department of physics looks forward to see greater focus on astronomy and cosmology research, along with new curriculum based academic activities.

The aim is to promote wider publicity and awareness with an Integration of research, teaching and science publicity activities

Astrophysics and Cosmology Research at BITS-Pilani , Pilani campus



The department of physics, BITS Pilani, has a moderate-sized astronomy & cosmology group with faculties and students working on a wide variety of research problems

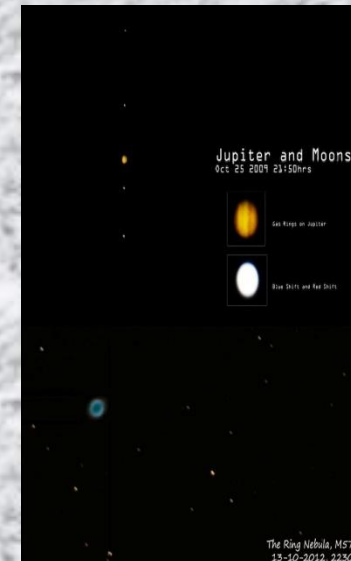
Our faculties use X-ray and infrared observation, jointly with optical and radio data to study star forming regions and the early phases of stellar evolution.

The cosmologists in the department work on diverse fields including phase transitions in the early universe, Baryogenesis, Lithium problem in Big Bang Nucleosynthesis (BBN) , Dark matter & Dark energy, structure formation, study of diffuse IGM, 21-cm Cosmology and cosmology using the Lyman-alpha forest flux distribution.

The Astronomy Club



***Astronomy Club, BITS Pilani** is a group of enthusiasts with a keen interest in astronomy. Students and faculty part of this group work to promote astronomy as a hobby and spread knowledge among the students of BITS and schools of the neighbouring areas*



Images taken by members of the Astro-club



The club uses two telescopes

*An 11-inch Schmidt-Cassegrain
and a 6-inch Galilean*

*The members learn about the working of
telescopes, observe various stellar objects and for
astrophotography. Sky-watching sessions and
quizzes are also organized for the students.*

*Celestron 11inch Schmidt
Cassegrain Telescope
a view finder and in-
built tracking system on
an equatorial mount*

Astro-club Activities



- *Intra club sessions on telescope handling and astrophotography*
- *Sky watching sessions at all major astronomical events*
- *Special educational sessions for the school students around Pilani*
- *Lecture series on popular astronomy and astrophysics*
- *Guest lectures by distinguished speakers during World Space Week*
- *Conducting annual quizzes like Astronut and Messier Marathon*
- *Organising workshops on observational astronomy in APOGEE*

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PHOTO CREDITS

Astroclub members

*Nalin Agrawal
Ramya Pillutla
Saurabh Bondarte
Shaleen Sharma*

Purpose

The Dumbbell-like Apple Core Neb
13-10-2012, 22

The Ring Nebula, M5
13-10-2012, 223

Jupiter
Oct 25 2009

The Pleiades
Oct 25 2009 23:20 hrs

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The purpose and activities of the astronomy enthusiasts has till date Been purely recreational . We feel the need to incorporate the existing facilities into the Mainstream undergraduate physics education

- *This shall be amongst the very few Universities where the students get to make use of astronomical facility as a part of undergraduate education*
- *The students would get an exposure to astronomy as an observational science*
- *The academic curriculum shall be enriched*
- *Help the students to develop skills that shall enable them to work in a group*
- *Exposure of students to observation based research in Astronomy*
- *Public Outreach and science popularization*





Thank You