



# Astrax 2019

29-31st March

Space Technology and Astronomy Cell  
Indian Institute of Technology Mandi  
Mandi, HP- 175005

## Introduction

Astrax 2019 is the first ever edition of the annual **Astro-Meet** of Indian Institute of Technology, Mandi. This astro-meet is being organised by the Space Technology and Astronomy Cell (STAC), IIT Mandi, and aims to bring some of the most brilliant minds of the country under one umbrella to explore the different realms of astrophysics, astronomy, cosmology.

## What AstraX is all about

Being the first and the biggest meet of its type in the Himalayas, AstraX will have competitive events ranging from messier hunts to coding hackathons, talks by proficient people from the technical and scientific worlds, practical and interesting workshops, an enthralling trip to one of the most serene and dark places in the Himalayas, and participation from the most reputed colleges of the country including many other IIT's.

### Keynotes

Here's the panel of probable keynote speakers.

#### Dr. Rathnasree Nandivada

The director of the Nehru Planetarium, Dr Rathnasree is an enthusiastic professional-amateur astronomer and works tirelessly for the promotion of amateur astronomy in India. Dr Rathnasree is actively involved in researching and restoring the Jantar Mantar, the observatory of Jai Singh built in 18th century, at New Delhi and Jaipur.

#### Mr. Juan Luis Cano Rodríguez

Juan Luis Cano is an Aerospace Engineer with a passion for scientific computing, applied math, programming, education, and outreach. Working as a Software Engineer at Satellogic, he is also a Python professor at Instituto Empresa and Barcelona Technology School and is the chair of the Python España association.

#### Dr. Redouane Boumghar

A data scientist, Dr Boumghar is a research fellow in Data Mining and Artificial Intelligence at European Space Agency and AI and Robotics Mentor at NASA Frontier Development Lab.

#### Speakers from LIGO, India

Envisaged as a collaborative project between a consortium of Indian research institutions and LIGO Laboratory in the USA, LIGO India has some of the most brilliant minds of the country associated with it. We are looking forward to having some reputed scientists from LIGO, India who will ignite the young minds with their motivational talks.

## Prof. Varun Bhalerao

An astrophysicist with his areas of interest covering transient astrophysical sources like supernova explosion, gamma-ray bursts, etc., Prof Bhalerao is a Vaidya-Raichaudhuri Prize Fellow, IUCAA: 2012-2017 and also the DST INSPIRE Faculty Fellow, IUCAA: 2014-2017.

## Speakers from ICTS

We will have speakers from the International Center of Theoretical Sciences to share their work and knowledge, and engage students at large on the issues and progress of modern science.

## Events

AstraX will have a host of events for the participants to compete in.

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|------------------------|------------------------------------|
| 1. Enigma              | A five-hour astronomical hackathon |
| 2. Messier Marathon    | A Messier Object Hunt              |
| 3. Infinitesimal Abyss | A Paper Presentation Event         |
| 4. Celesta             | All-Night Astrophotography         |
| 5. The Gordian Knot    | An AstroQuiz                       |
| 6. Shooting Stars      | Online Astrophotography            |

## Workshops

### Aero Satellite

Space Development Nexus will be conducting an aero-satellite workshop that will provide the students with an opportunity to experience the design life cycle of an aerospace system, including complete designing of a miniature satellite from scratch.

### Space Rover

Aeroengineers will be conducting a workshop on the practical making of a Space Rover to provide the students with practical touch-and-feel working experience on the rover mechanism.

## A trip to the Prashar Lake

Located at a height of 2730 m above the sea level and guarded by the mountain peaks on all the sides, Prashar lake is adorned with deep blue waters and breathtaking views of the night sky. It is an ideal location for stargazing and astrophotography

## Bapu Khagol Mela

Bapu Khagol Mela, the first-of-its-kind programme to celebrate Mahatma Gandhi's deep-rooted liking for astronomy, will be a year-long celebration of his vision of promoting sky gazing.

This outreach program aims at educating people about telescope observations and emphasises the importance of sky gazing.

We will be conducting hands-on-activities for school children to acquaint them with the basics of observational astronomy and develop their interest in related fields.