

# A Career in Astronomy and Astrophysics

Since time immemorial the members of our species have looked up at the heavens and been left in wonder by the celestial objects that light up the sky. The development of science has only amplified the wonder. We now wonder about how these objects came into being and the universe in general. It is the pursuit of the challenge of answering this question and the immense satisfaction gained on finding the answer that drives people to seek a career in professional astronomy and astrophysics.

## □ Astronomy and Astrophysics:

Understanding the laws of physics and Universe

– Studying the nature, composition, origin and evolution of cosmic bodies.

- ✓ Cosmology and Large Scale Structures
- ✓ Galaxies, AGNs and Black Holes
- ✓ Stellar Astrophysics and Exoplanets
- ✓ Solar Physics and Planetary System
- ✓ Gravitational Waves: Detection and Study

Love Astronomy?

Go ! Visit and participate-

- Public Outreach Programs
- Astro clubs
- Planetariums

Want to be a professional Astronomer?

Do Physics, Electronics, Mathematics and Programming!

## Observational Astronomy and Astrophysics:

- ✓ Observing celestial Objects
- ✓ Analyzing and Processing the Data
- ✓ Making and maintaining Catalogues
- ✓ Interpretation of the Information

## Theoretical Astronomy and Astrophysics:

- ✓ Mathematical Modeling
- ✓ Simulations and Coding

## Astro- Instrumentation: Designing and Development

- ✓ Development of Detectors
- ✓ Telescope Making
- ✓ Controlling Systems for the same
- ✓ Software Development and Communication

A typical career path to be followed in order to become a professional astronomer :

