

Career, Courses and Jobs in Astronomy and Astrophysics

Astronomy and Astrophysics

Key words- Planetary Science, Planetary Astronomy, Earth Sciences, Physics or Chemistry with planetary, Astronomy, Geoscience, Atmospheric-Ocean Sciences, Astro-chemistry and Astrobiology, Interstellar Medium, Star and Planet formation, Radio/sub-millimeter/infrared astronomy, Exo-Planetary and Cometary Science, “Relativistic, Magnetic and Dynamical Astrophysics

Introduction of Astronomy and Astrophysics

Astronomy is a combination of physics, chemistry and mathematical principles/rules. Astrophysics can be called its offshoot. It deals with detailed study of the physical, chemical and dynamic properties of celestial objects. It also deals with the phenomena over and above Earth's atmosphere. There is associated study of calculations of orbits, gravitational forces, satellites, meteors, galaxies, comets, stars, planetary objects, planets, satellites etc. In Astrophysics, we explore and ensure properties/nature of the astronomical objects with the help of laws of physics and chemistry. There is also the field of Cosmology which studies the origin and evolution of the universe.

Eligibility Astronomy and Astrophysics

10 +2 with PCM

Entrance Tests (PhD from IUCAA):

1. IUCAA-NCRA Admission Test (INAT) Link Details:

<http://inat.ncra.tifr.res.in/inat>

2. Joint Entrance Screening Test (JEST)

Details: <http://www.jest.org.in/>

3. CSIR-UGC NET for JRF (Physics)

Courses Astronomy and Astrophysics

1. M.Sc. /M. Phil PhD (Physics)

2. M.Sc. Astronomy,

3. M.Sc. – Astrophysics

4. Integrated M. Tech- Ph. D (Tech.) programme in Astronomical Instrumentation (Eligibility-B. Tech / BE degree in Electrical/ Instrumentation/ Electronics and Communications /Computer Science/Mechanical Engineering or M. Sc degree in Physics / Electronic Science / Astrophysics/ Applied Mathematics /Applied Physics are also eligible to apply)

5. Ph. D Astrophysics/Astronomy

Job Title- Astronomy and Astrophysics

1. Solar astrophysics

2. Theoretical astrophysics

3. Astronomer,
4. Research Scientist,
5. Physicist,
6. Planetary Scientist,
7. Space Physicist,
8. Dynamicist,
9. Planetary Spectroscopist,
10. Galactic Astronomer,
11. Stellar Spectroscopist
12. Climatologist
13. Aeronautical engineer

Institutes/ Universities Astronomy and Astrophysics

1. University of Delhi, Delhi
2. Indian Institute of Astrophysics, Bangalore
3. Indian Institute of Science, Bangalore
4. Raman Research Institute, Bangalore
5. Inter-University Centre for Astronomy and Astrophysics (IUCAA) – Pune
6. National Centre for Radio Astronomy – Tata Fundamental Research Institute – Pune.
7. Aryabhata Research Institute of Observational Sciences (ARIES), Nainital
8. Harish-Chandra Research Institute (HRI), Allahabad
9. Osmania University, Hyderabad
10. Madras University, Chennai
11. Chennai Mathematical Institute (CMI), India
12. Astronomy & Astrophysics at the Indian Institute of Space Science & Technology (IIST), Thiruvananthapuram
13. School of Earth and Planetary Sciences (SEPS), (NISER), Bhubaneswar, India

https://www.astron-soc.in/young_astronomers_award



ASTRONOMICAL SOCIETY OF INDIA

Young Astronomer Award

The aim of this award, instituted by the Astronomical Society of India, is to motivate young Indian scientists to make outstanding research contributions in any aspect of astronomy/astrophysics and to publish the same in the Bulletin of the Astronomical Society of India.

The award consists of a cash prize of Rs.10,000/- and a scroll/citation of honour which mentions the name/s of the author/s and the title of the winning research article, duly signed by the current President and the Secretary of the Society. The award is given once in two years, and at the time of each such 'year of award' papers published in the Bulletin of ASI during the two previous calendar years and satisfying necessary conditions mentioned

below are considered for the award. For example, the papers published during the calendar years 1983 and 1984 were considered for the first `year of award' which was the year 1985.

Only those research articles may be considered for the award, whose first author is an Indian National and whose age does not exceed 35 years on the first day of the period for which the award is being made. In case the article is written by more than one author, the prize money will be divided equally among all those authors who are eligible in the sense defined above.

The award is made on the basis of selection by a panel of three referees duly constituted by the Executive Council of ASI, soon after the publication of the last issue for the period of the Bulletin of ASI for which the award is made.

The Young Astronomer for the year 2013 :

Formation rates of dark matter haloes (December 2011 issue)
Sourav Mitra, Girish Kulkarni, J. S. Bagla and Jaswant K. Yadav

Resources and Materials

<https://www.astron-soc.in>

<https://www.iiap.res.in>

<http://www.iisertirupati.ac.in/>

<https://www.youtube.com/channel/UCAQjpL4n1RI-XhspocMElg/videos>

https://spacecareers.uk/?p=astrophysicists_astronomers

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