

Indian Institute of Technology Indore
Simrol Campus, Khandwa Road, Indore – 453552
Discipline of Astronomy, Astrophysics and Space Engineering
Rolling Advertisement for Admission to Ph.D. Programme

IIT Indore is an institution of national importance and is ranked highly in both research and teaching. According to the World University Rankings 2020 by the Times Higher Education IIT Indore is ranked 3rd overall amongst all Institutes of India.

Research Areas:

Discipline of Astronomy, Astrophysics and Space Engineering (DAASE) at IIT Indore is a unique discipline among all IITs. It offers a dedicated platform to pursue research in astronomy, astrophysics and space science and engineering, and related areas. The DAASE is seeking applications for PhD positions under the following three broad areas of research:

- **Astronomy and Astrophysics**
- **Atmospheric and Space Sciences**
- **Instrumentation in Astronomy, Atmospheric and Space Sciences**

Under these broad domains, the faculties of DAASE are involved in cutting edge research in various interesting topics such as, Observational and Computational Cosmology, Galaxy Clusters and Large Scale Structures, Computational Astrophysics, Neutron Stars, Pulsars and Black Holes, Transients, Active Galactic Nuclei, Statistical Inference, Machine Learning and Big Data, Radio and X-ray Observations, Radio Astronomy Instrumentation, Galaxy and Interstellar Medium, Star and Planet Formation, High Energy Astrophysics, Gamma-ray Astronomy, Multi-wavelength & Multi-messenger Astronomy, Ionosphere & Satellite Communication/Navigation, Spacecraft & Payload Control, Interplanetary Space Weather, Remote Sensing and RADAR, Signal and Image Processing etc.

Our faculty members are actively involved in international mega-science project the **Square Kilometre Array (SKA)**, **PLUTO code**, **Navigation with Indian Constellation (NavIC)**, **ESA/JAXA BepiColombo (mission to Mercury)**, **ESA Comet Interceptor mission**, and related research. Our faculty members and students are extensively using national/international facilities like the **ASTROSAT**, **LOFAR**, **uGMRT**, **VLA**, **ATCA**, **SWIFT**, **NuStar**, **FACT**, **MAGIC**, **NICER**, **XMM-Newton**, **Chandra X-ray Observatory**, **Fermi-LAT**, **IceCube Neutrino Observatory**, **Himalayan Chandra Telescope**, **ESA Rosetta**, **NASA spacecraft observations (e.g. ACE, WIND, Van Allen Probes, GOES, THEMIS etc.)** and will be actively involved in upcoming projects e.g. the **Thirty Meter Telescope**, the **James Webb Space Telescope (JWST)**, **EUCLID**, **SEAMS**, **Daksha**, **MACE**, **Aditya-L1 mission**, **Cherenkov Telescope Array** and **Large Synoptic Survey Telescope**. The department offers the M.Sc. and Ph.D. degrees as well as a minor in Astronomy supporting a dynamic and rapidly growing community interested in Space Research and Applications. The research activities and experimental facilities have been well supported by various extramural research and infrastructure grants both by National and International funding agencies.

Applicants are strongly advised to visit the departmental website (http://people.iiti.ac.in/~astro/beta_astro/?page_id=24) and the profiles of the individual faculty members before applying for the PhD programme:

- **Siddharth Malu** : <http://www.iiti.ac.in/people/~siddharth/>
- **Abhirup Datta** : <http://iiti.ac.in/people/~abhirup.datta/>
- **Bhargav Vaidya** : <http://www.iiti.ac.in/people/~bvaidya/>
- **Suman Majumdar** : <http://www.iiti.ac.in/people/~sumanm/>
- **Saurabh Das** : <http://www.iiti.ac.in/people/~saurabh.das/>
- **Manoneeta Chakraborty** : <http://www.iiti.ac.in/people/~manoneeta/>
- **Amit Shukla** : http://people.iiti.ac.in/~astro/beta_astro/?page_id=24
- **Rajkumar Hajra** : <http://people.iiti.ac.in/~rhajra/>
- **Anjali Rao** : http://people.iiti.ac.in/~astro/beta_astro/?page_id=24

Categories of Admission:

Please refer to the main PhD Advertisement of the Institute available at <http://academic.iiti.ac.in/phdadvt.php> .

Eligibility Criteria:

Please refer to the main PhD Advertisement of the Institute available at <http://academic.iiti.ac.in/phdadvt.php> for the Minimum Educational Qualification and Qualifying Examination. Candidates fulfilling the Minimum Educational Qualification and Qualifying Examination (mentioned in the above link) from the relevant science and engineering disciplines, e.g. Physics, Applied Physics, Astronomy, Astrophysics, Space Science and Engineering, Mathematics, Applied Mathematics, Statistics, Applied Statistics, Earth and Atmospheric Science and Engineering, Remote Sensing, Software Engineering, Information Technology, Data Science, Data Analytics, Engineering Physics, Aerospace Engineering, Aeronautics, Electronics and Communications Engineering, Electrical Engineering, Computer Science and Engineering, Civil Engineering, Mechanical Engineering, Metallurgy Engineering and Materials Science, Biophysics, Biotechnology, Bioinformatics, Chemistry, Chemical Engineering are welcome to apply.

Application Procedure:

PhD Admission in DAASE takes place in two stages:

Based on the application shortlisted candidates will be invited for the **Online Entrance Examination. Candidates who will qualify the Entrance Examination will be notified to attend the **Online** Interview.**

Tentative dates for next round of the Entrance Exam: **05 November 2020**

and Interviews: **06-07 November 2020.**

Shortlisted candidates for this round will be notified by email on or before **01 November 2020.**

Candidates must apply **ONLINE** through our website: <https://academic.iiti.ac.in:8443/nregistration.jsp>

This is a rolling advertisement. All applications received by **30 October 2020 will be considered for this round of Examination and Interview. Any application received after this date will automatically be considered for the next round.**

Application Fee: Please refer to the main PhD Advertisement of the Institute available at <http://academic.iiti.ac.in/phdadvt.php> .

Supporting Documents: Please refer to the main PhD Advertisement of the Institute available at <http://academic.iiti.ac.in/phdadvt.php> .

Motivated students with outstanding academic performance in relevant Science and Engineering disciplines are desirable.

All shortlisted applicants are required to have ready scanned copies of all the required supporting documents (this includes the application form, application fee payment receipt, recent passport photographs, all relevant certificates, results/score cards/rank cards of the relevant qualifying exams and any other documents necessary to establish the claims made by them in the application as per the main PhD advertisement of the Institute) when they are invited for the written test and the interviews.

Recommendation Letters: The eligible candidate should also arrange to send **TWO** letters of recommendation (in the specified format available in the application portal) from the referees listed in the application form should be sent directly to both the emails: dpgcastronomy@iiti.ac.in and astro-office@iiti.ac.in before the date of the entrance test.

For any queries please contact:

Dr. Suman Majumdar (DPGC Convener DAASE) ; Dr. Abhirup Datta (Head, DAASE)

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