POSTGRADUATE RESEARCH PhD STUDENTSHIP
Armagh Observatory & Planetarium

Applications are invited for a Postgraduate Research Studentship(s) tenable at Armagh Observatory & Planetarium (AOP) starting from October 2027.

Armagh Observatory and Planetarium, located in Northern Ireland, UK, is an astrophysical research institute founded in 1789. The Observatory has 6 staff astronomers, 3 post-doctoral fellows, a dozen PhD students and several visiting and honorary astronomers. Research interests include Solar-System Science, Stellar, Galactic and Extra-galactic Astrophysics. The Planetarium is the longest running planetarium in the British Isles which was opened in 1968.

Candidates must have, or expect to obtain, at least an upper second-class honours degree or equivalent in an appropriate discipline (e.g. Physics, Mathematics, Astronomy or Astrophysics). Successful candidates will enroll at an appropriate university and carry out a research programme primarily based at AOP. The successful applicants will receive a grant based on the United Kingdom Science and Technology Facilities Council rate (£21,805 per annum in 2026/27) which lasts 3.5 years. In addition, AOP will pay the university fees (irrespective of the applicant's nationality) and may contribute towards relocation expenses.

Prospective candidates should fill in the application form and ensure that their references as well as any other required additional documents are received on or before the deadline of Friday 22 January 2027. First selection will take place as soon as possible after the deadline with subsequent selections thereafter until all positions have been filled.

AOP is committed to building and maintaining a diverse and inclusive environment and we have the status of IoP Juno Practitioner. We embrace equality and diversity and particularly welcome applications from women, black and minority ethnic candidates, and members of other groups that are under-represented in physics. Applications are welcomed from candidates of all nationalities.

The application form, CV and other supporting documents should be sent to hr@armagh.ac.uk. Potential applicants can send any queries to HR or the potential supervisor for the project which are listed on our web site, www.armagh.space.

ARMAGH OBSERVATORY & PLANETARIUM

FURTHER DETAILS

Armagh Observatory & Planetarium (AOP) receives baseline support from the Northern Ireland Department for Communities (DfC), and its staff receive regular awards of telescope time and research grants from the Science and Technology Facilities Council (STFC), and other organizations. AOP is a full partner in international projects such I-Lofar, GOTO, CTA and SALT. Further details about AOP and possible research topics can be obtained from www.armagh.space

The fixed-term postgraduate studentship position is available for suitably qualified candidates for 3.5 years starting October 2027. Candidates must have, or expect to obtain, at least an upper second-class honours degree or the equivalent in an appropriate discipline (e.g., Physics, Mathematics, Astronomy or Astrophysics). Since AOP is not a degree awarding body, successful candidates register for a PhD at an appropriate University (often Queen's University Belfast) and the PhD student will normally carry out a research programme based in Armagh. Enrolment for a PhD will be in accordance with the regulations of the governing university. This will typically involve enrolment in the first year for the degree of MPhil, with subsequent enrolment for a PhD being permitted in the second year following successful completion of a differentiation or transfer procedure and evidence of satisfactory progress in the first year in accordance with University regulations. The candidate must ensure that they meet UK Visa requirements (if needed), according also to the latest changes in relation to international students, including EU/EEA nationals (see here and here). This will include also the attainment of an approved English language certificate (see here for details of English language requirements at Queen's University Belfast). Candidates also need to be aware of any UK NHS Surcharge which may be due.

Each postgraduate student will normally be assigned a first and second supervisor who will be senior members of AOPs research staff, and possibly an additional supervisor who is a full-time academic member of the University where the student is registered. Performance will be assessed around the middle of the first year, and the assessment used to inform the transfer process from MPhil to PhD. In addition to meeting the regulations of the University at which students are registered, our postgraduate programme includes training in research methodology (e.g., literature searches, use of computer databases, writing papers, etc.) and the development of communication skills through the presentation of informal talks and colloquia. Students are obliged to attend our seminar programme and astronomical discussion meetings, all of which provide, at approximately weekly intervals, an introduction to a wide range of new astronomical results and concepts. Students may also have to attend training courses at the University of their enrolment. Students are also required to comply with all policies, rules and regulations, details of which will be provided at the commencement of the studentship.

In addition to pursuing an individual research programme, the PhD student may be asked to carry out other duties that play a full part in various AOPs activities. Students could travel to remote observatories to perform observations and to attend conferences and workshops. Research students are also expected to contribute to the public understanding of astronomy and related sciences and to promote the activities of AOP at both national and local levels.

There may also be opportunities to deliver occasional popular lectures or assist with the supervision of work-placement or work-shadowing students from secondary schools.

STUDENT SELECTION PROCESS

Towards the end of the calendar year, staff astronomers are asked to put forward abstracts of potential PhD student projects. Armagh Observatory and Planetarium (AOP) then advertise PhD studentships via various means including the RAS jobs email circular, the AAS Job Register, email circulars and the AOP website.

AOP is an equal opportunities employer and welcomes applications from candidates irrespective of nationality, ethnic origin, religion, gender, political opinion, marital status, sexual orientation, or disability. In addition, AOP is a Project Juno Practitioner. The aim of Project Juno is to recognise and reward physics departments, schools, institutes and organisations that can demonstrate they have taken action to address gender equality in physics and to encourage better practice for all staff.

All applicants for AOP studentships are obliged to meet the entry requirements for postgraduate research for the University, which is normally at least a 2.1 Honour's degree or equivalent in a relevant subject. International students whose first language is not English are asked to provide evidence of competence in written and spoken English as well as meeting the other entrance requirements.

Once the initial deadline for applications has passed, all applications are circulated to staff astronomers, who will grade them based on a previously established set of shortlisting criteria, which are listed at the end of this document. With this ranking at hand, a smaller selection panel, typically comprising three or four astronomers, will then determine which students should be offered interviews. During the interview students will be asked about their research experience, broad astronomical knowledge, motivation and interest in the offered projects and AOP activities. After the interview stage, potential supervisors are identified for the top ranked students each of whom will have specified which projects interests them most. In identifying potential supervisors (the `first supervisor') other factors can be considered such as how many existing PhD students they have and whether the project in question advances key strategic objectives of AOP. Finally, offers to the successful applicants are made with the proviso that they meet the University entrance requirements and a successful post-graduate application to the University. Applicants should not accept an offer until they have considered offers/potential offers from other institutions and have made a final decision.

Staff astronomers and panel members participating in the selection process will have received relevant training relating to equal opportunities

Initial ranking and shortlisting criteria

- Clarity, accuracy and completeness of the candidate application
- Candidate academic performance
- Candidate academic references
- Candidate motivation
- Candidate research experience
- Fit with AOP research interests