Coláiste na Tríonóide, Baile Átha Cliath
Trinity College Dublin
Ollscoil Átha Cliath | The University of Dublin

PhD position in planetary-system dynamics at Trinity College Dublin

We invite applications for a 4-year PhD position in planetary-system dynamics at Trinity College Dublin (TCD), Ireland. The successful candidate would join Prof. Tim Pearce's research group, funded by the TCD School of Physics.

The successful candidate can work on any aspect of planetary-system dynamics, including (but not limited to): debris discs, protoplanetary discs, planet-disc interactions, planet-planet interactions, stellar flybys, white-dwarf discs and exozodiacal dust. Projects typically comprise dynamical simulations and analytics, with examples of relevant work including: Pearce et al. (2025), Poblete at al. (2026), Costa et al. (2024), Pearce et al. (2022a) and Pearce et al. (2022b) (to access these papers, follow the links, then try the various 'Full Text Sources' options). Whilst Prof. Pearce has several possible projects in mind, the actual project could change and evolve based on the specific interests of the successful candidate.

The successful candidate would join the Trinity Astrophysics Group, a friendly and vibrant environment conducting world-leading research on planetary systems, circumstellar discs, exoplanet atmospheres, supernovae and radio astronomy. TCD is located in the heart of Dublin, and the Astrophysics Group is part of a wider community working on exoplanets and star & planet formation. Trinity has access to ESO and ESA observatories such as ALMA, *JWST*, *HST*, the VLT, and soon the ELT, as well as both EU and Irish career-development opportunities.

Applicants must, by the start date, have achieved a 1st or upper 2nd class (I or II.1, or equivalent listed here) in a Master's or 4-year undergraduate degree in Astrophysics or a related field. They must also have experience in simulations and/or dynamical modelling.

The full-time PhD studentship is open to EU/EEA/Swiss/UK-based applicants (due to differing tuition fees; please check your eligibility here under '*Postgraduate EU Fee Status*'). The position is fully funded for 4 years (standard in Irish Universities), covering tuition fees and a tax-free stipend of €25000/year, as well as a laptop/computer and work-related travel costs. The nominal start date is 1 September 2027, though this can be negotiated. The group has access to dedicated computing servers and high-performance facilities through Trinity's Research IT infrastructure and the Irish Centre for High-End Computing (ICHEC).

Applicants should submit a CV (max. 2 pages), including names and emails of two referees to be contacted if shortlisted, plus a research statement (max. 1 page) outlining research/academic experience and motivation for pursuing a PhD in astrophysics. Complete applications received by the **deadline of 11 January 2027** will receive full consideration. Applications from traditionally under-represented groups in physics and astronomy are particularly welcome.

Applications, as well as queries, can be submitted via email to astrojobs@tcd.ie – please include '*Planetary-system dynamics PhD application'* in the subject heading.