



## TRINITY COLLEGE UNIVERSITY of OXFORD

### Junior Research Fellowship in Mathematics or Computer Science

**Trinity College invites applications for a full time Junior Research Fellowship (JRF) in Mathematics or Computer Science**, tenable for a fixed term of three years from 1 October 2025.

A Junior Research Fellowship is a career development post, designed to enable an outstanding early career academic to undertake an independent programme of research that substantially develops or is different from their doctoral research. In making this appointment, Trinity College aims to develop and strengthen the research environment of the College, and to contribute to the goal of maintaining the University of Oxford as a leading centre for research.

#### Mathematics and Computer Science at Trinity College

Trinity College, founded in 1555, occupies a beautiful, green and spacious site in the centre of Oxford. The academic community of the College comprises around 300 undergraduates, 150 graduate students, 40 Fellows and 30 Lecturers across a range of humanities, social science, and science disciplines. The College prides itself on combining the highest academic standards with a particularly friendly sense of community. Our vision is for Trinity to be recognised as a modern College that attracts some of the best academics in the world and welcomes a diverse and widely representative student community, in which people of all backgrounds feel equally valued, supported and able to flourish.

Trinity offers an enriching academic environment for early-career research in Mathematics and Computer Science. We are proud to number among our Fellowship outstanding academics in these disciplines:

- Marta Kwiatkowska is Professor of Computing Systems and Professorial Fellow at Trinity. Her research is concerned with modelling and analysis methods for complex systems, such as those arising in computer networks, electronic devices and biological organisms.
- Dave Parker is a Professor of Computer Science and Tutorial Fellow at Trinity. His research is in formal verification, with a particular focus on the analysis of probabilistic systems.
- Ian Hewitt is a Professor of Applied Mathematics and a Tutorial Fellow at Trinity. His research develops and solves mathematical models to help understand problems in geoscience including, in particular, the behaviour of glaciers and ice sheets and their interaction with the climate system.

- Melanie Rupflin is an Associate Professor in the Mathematical Institute and a Tutorial Fellow at Trinity. Her research focuses on partial differential equations and variational problems that are inspired by questions from geometry.
- Janet Pierrehumbert is Professor of Language Modelling in the Oxford e-Research Centre and a Senior Research Fellow at Trinity. Her research uses machine learning methods to understand language systems both in individuals and in communities.

Our Fellows will support the career development of the new Junior Research Fellow, and will facilitate connections to appropriate research networks in the University.

One of the benefits of the college environment is the opportunity that it offers to work in a small and supportive multi-disciplinary academic community. At any one time, the College supports 10-12 early career research fellows in a wide variety of fields, so the JRF will become part of a lively group of academics at a similar career stage.

Early career researchers, including Junior Research Fellows, are encouraged to mentor and support the College's graduate students. The MCR (Middle Common Room, i.e. the College's graduate community) organises regular research events, in which all of the College's early career researchers are warmly encouraged to participate. The JRF may be asked act as a College Advisor for a small group of graduate students.

For full information about Trinity College, please see the College website: [www.trinity.ox.ac.uk](http://www.trinity.ox.ac.uk).

### Eligibility

Candidates must:

- hold a recently completed doctorate, or be close to completion of a doctorate.
  - Those who formally submitted their doctoral thesis for viva voce examination before 1 October 2022 are not eligible, unless they have since had a career break (e.g. a period of parental leave, family commitments, illness) or if there are other exceptional personal circumstances.
  - Candidates who have not yet submitted their doctoral thesis must do so no later than four months before the start date of this post (i.e. by 1 June 2025).
- not have held a permanent academic post, nor a salaried, research-only appointment for the purpose of self-directed research of more than 12 months' duration, before taking up the Junior Research Fellowship.

### Duties

The Junior Research Fellow will:

- undertake a sustained programme of research in Mathematics or Computer Science and publish the findings. The research must be of a quality that would make the Junior Research Fellow eligible for entry into the next Research Excellence Framework (REF), or any system for assessing the quality of research in UK higher education institutions that replaces it;
- contribute to the intellectual life and community of Trinity College, for instance by mentoring undergraduates or acting as a College Advisor to graduate students, convening and participating in events related to their area of research or early career

research more broadly conceived, or offering talks to students, Fellows, friends of the College or the wider public as part of a Trinity-led programme of events;

- serve on one committee of the College, e.g. Academic Committee, Academic Grants Committee, or Access Committee, but not the Governing Body

### Criteria for appointment

The successful applicant will:

- hold, or be close to completing, a PhD or equivalent in the broad fields of Mathematics or Computer Science (see eligibility criteria above);
- demonstrate potential for outstanding, independent achievement in their field of research, e.g. through publications and their research proposal;
- be able to demonstrate the feasibility of carrying out their proposed research in Oxford. Candidates requiring equipment or consumables support must communicate with the relevant department at the time of application and will be required to confirm that they have done so as part of the interview process;
- have excellent communication skills, demonstrated through a presentation at interview, and experience of presenting their work at conferences and/or research seminars;
- have a coherent proposed research programme for the duration of the Fellowship, of a standard which will contribute to and enhance the national and international profile of the field in the University;
- have the ability and commitment to serve on a committee of the College.
- be able to suggest ways in which they and their research would benefit from and contribute to the academic community at Trinity College.

### Remuneration and other entitlements

- *Salary*: The starting salary is point 30 on the HE single pay spine (currently £39,749 p.a., which includes the Oxford University cost of living adjustments), rising to points 31 and 32 on this scale in years 2 and 3 of the appointment.
- *Accommodation*: No housing allowance is payable in connection with this post. Single accommodation may be available to rent from the College during the period of the Fellowship if the Fellow wishes, subject to availability.
- *Dining rights*: The Fellow will be entitled to lunch and dinner free of charge at the Common Table (SCR) during term and vacation, except when the kitchens are closed.
- *Membership of the Senior Common Room (SCR)*: Junior Research Fellows are members of the Senior Common Room at Trinity College.
- *Research allowance*: There is an allowance of up to £1,795 p.a. (reviewed annually) to cover research expenses not obtainable from other sources.
- *Pension*: The Fellow will be eligible to join the USS pension scheme.
- *Teaching*: Junior Research Fellows are encouraged to develop their teaching skills, if appropriate, and may undertake a limited amount of teaching per week in term (up to a maximum of six hours). The College will have first call on any teaching capacity, for which there would be separate remuneration.

### Other terms and conditions

*Right to work:* The appointment will be subject to the provision of proof of the right to work in the UK. If a UK visa is required, the College with the assistance of the University's Staff Immigration Team will advise and assist after offer.

Applicants are asked to note that the visa application process will require them to submit no later than four months prior to the start date of this post, either a copy of their doctoral award certificate, or an academic reference confirming that their doctorate has been awarded, or an academic reference confirming that they have submitted their thesis, if they have not yet completed.

*Place of work:* The Fellow is expected to work in Oxford, and to participate in the life of the College, for a substantial part of each week during Full Term (weeks 1-8 of each of Oxford's three terms), unless their research requires them to work elsewhere for a period of time during the JRF.

*Term of appointment:* This Junior Research Fellowship is for a fixed term of three years. The post is non-renewable because, as a career development post, it is designed to provide a starting point for a successful research career. The Junior Research Fellow must submit a report on their research activities to the Senior Tutor each year, and in the first they will need to undertake an interim review in order to be confirmed in post for the remaining period of appointment.

### How to apply

**Applications must be sent by email (in PDF format) to the Academic Administrator, Trinity College ([academic.administrator@trinity.ox.ac.uk](mailto:academic.administrator@trinity.ox.ac.uk)) by 12 noon (UK time) on Monday 20<sup>th</sup> January 2025.** They must comprise:

- a curriculum vitae including a list of publications
- outline of previous research (approx. 500 words)
- outline of the proposed programme of research (approx. 1,000 words)
- the names and email addresses of two referees (one of whom should be a recent research supervisor), who should be asked by the candidate to email their references directly to the Academic Administrator. **It is the responsibility of candidates to ensure both referees send their references by email directly to the Academic Administrator ([academic.administrator@trinity.ox.ac.uk](mailto:academic.administrator@trinity.ox.ac.uk)) before the closing date of 12 noon (UK time) Monday 20<sup>th</sup> January 2025.**

Shortlisted candidates will be invited to give a short presentation on their research and research plans to the selection committee. Interviews will take place in person, where possible. Reasonable interview expenses (including overnight accommodation, if required, and travel within the UK) will be reimbursed. The option of an online interview will be available to candidates applying from outside the UK, and UK-based candidates who request this interview format.

Trinity College is an equal opportunities employer. To ensure that our Equality and Diversity Policy is fairly and fully implemented, and for no other reason, we ask that you complete our Equal Opportunity Monitoring Form available on the website and return it to the College Accountant ([nasera.cummings@trinity.ox.ac.uk](mailto:nasera.cummings@trinity.ox.ac.uk)).