



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Pure Mathematics, School of Mathematics



Salary: Grade 7 (£33,199 – £39,609 p.a.)

Reference: MAPMA1114

Closing date: 27 August 2019

Fixed-term until 31 August 2020 with the possibility of extension, dependent on funding.

We will consider job share / flexible working arrangements

Research Fellow in Pure Mathematics

School of Mathematics, Faculty of Mathematics and Physical Sciences.

Are you an ambitious researcher looking for your next challenge? Do you have an established background in Pure Mathematics? Do you want to further your career in one of the UKs leading research intensive Universities?

We are looking for a Research Fellow to join our project “Univalent type theories: models, equalities, and coherence”, which seeks to advance Homotopy Type Theory. In particular, the project seeks to study homotopy-theoretic models of type theories and their connections with Higher Topos Theory.

You will contribute to the project by carrying out original research, preparing research papers for publication in international journals and conference proceedings, and giving research seminars and conference talks.

You will have a PhD in Mathematics, Computer Science or a closely allied discipline (or have submitted your thesis before taking up the role), alongside experience in Type Theory, Category Theory or Homotopy Theory. You will also have the ability to conduct independent research and a developing track record of publications in international journals. In addition, you will have excellent communication, planning and team working skills.

What does the role entail?

As a Research Fellow, your main duties will include:

- Designing, planning and conducting a programme of investigation, in consultation with Dr Nicola Gambino (Principal Investigator);
- Generating independent and original research ideas and methods on Homotopy Type Theory, with an aim to extend the Mathematical Logic group research portfolio;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;



- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Research Fellow you will have:

- A PhD (or have submitted your thesis before taking up the role) in Pure Mathematics, Computer Science or a closely allied discipline;
- A strong background in Category Theory, Type Theory or Homotopy Theory;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience of pursuing external funding to support research;
- Experience in Homotopy Type Theory or Univalent Foundations;
- Experience in Higher Category Theory or Higher Topos Theory.



How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

[Dr Nicola Gambino](#), Associate Professor in Pure Mathematics

Tel: +44 (0)113 343 5143

Email: n.gambino@leeds.ac.uk

Additional information

A diverse workforce

The Faculty of Mathematics and Physical Sciences is proud to have been awarded the [Athena SWAN Bronze Award](#) from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our [equality and inclusion webpage](#) provides more information.

Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our [Working at Leeds](#) information page.

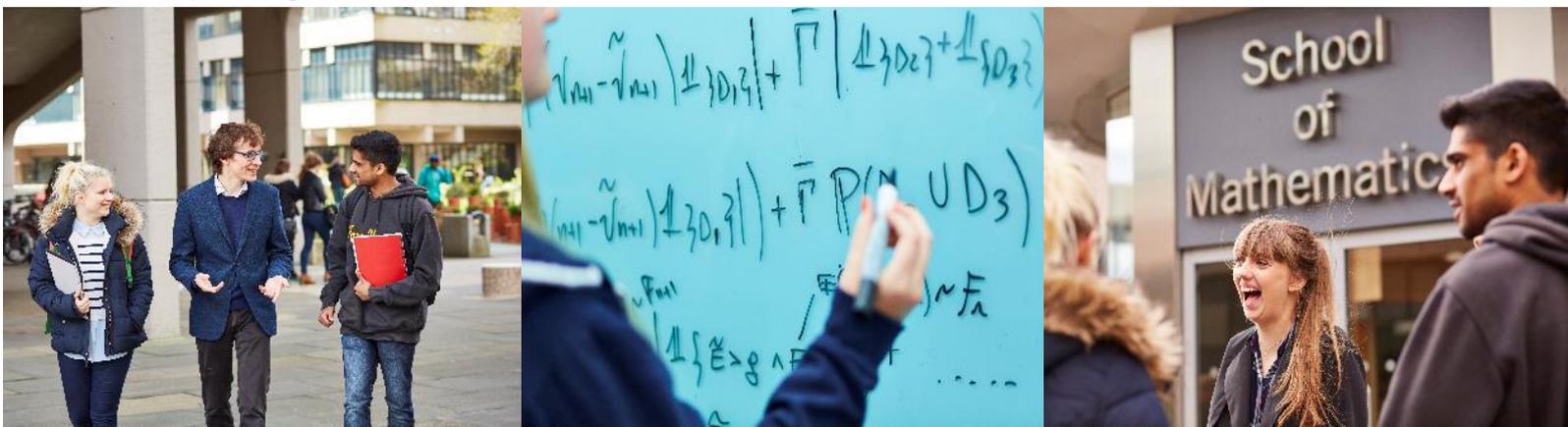
Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at disclosure@leeds.ac.uk.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.



Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

