UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Stochastic Analysis,

Faculty of Engineering and Physical Sciences

Salary: Grade 7 (£37,099 – £44,263 p.a.) Due to funding restrictions, an appointment will not be made higher than £39,347 p.a.

Reference: EPSMA1109

Closing date: Wednesday 08 May 2024

Fixed term until 30 September 2026, available from 01 October 2024

We are open to discussing flexible working arrangements

Research Fellow in Stochastic Analysis, School of Mathematics.

Are you passionate about stochastic analysis and its applications to differential equations? Do you have a PhD in Mathematics or a related discipline, and a strong background in stochastic analysis? Do you want to join a dynamic and collaborative research team?

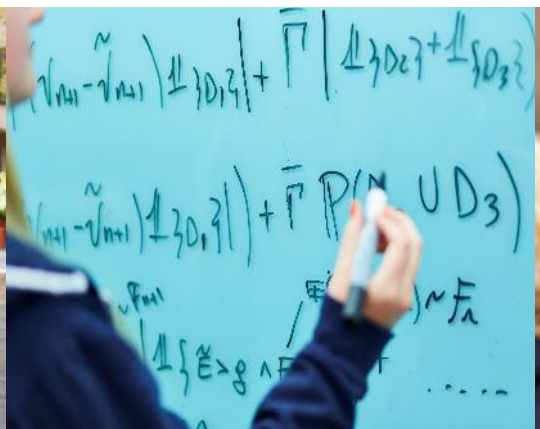
We are looking for a Research Fellow to join our team working on stochastic analysis, with a focus on regularisation by noise phenomena. The post is funded by the EPSRC project EP/Y016955/1 “Regularisation by noise: beyond Itô's theory” and aims to investigate the effects of noise on the well-posedness and qualitative properties of solutions to differential equations, with a focus on non-Markovian and/or infinite dimensional settings.

You will work closely with Dr Konstantinos Dareiotis and Dr Khoa Lê. You will have a PhD in Mathematics (or have submitted your thesis before taking up the role) or a related discipline, and a strong background in stochastic analysis, partial differential equations, and functional analysis. The position is for two years, starting from October 2024 or as soon as possible thereafter.

What does the role entail?

As a Research Fellow, your main duties will include:

- Working in collaboration with the project team to develop mathematical tools for the quantification of the regularising properties of noises and their application in solvability of equations, including Stochastic Partial Differential Equations and Rough Differential Equations;
- Generating and pursuing independent and original research ideas in the appropriate subject area;
- 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 research;


- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals and by presentation at national and international meetings;
- Working independently and as part of a larger team of researchers, both internally and externally, to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- 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 Mathematics or a closely allied discipline;
- A strong background in stochastic analysis;
- Some experience in at least one of the following topics: fractional Brownian motion, stochastic partial differential equations, rough differential equations;
- Good time management and planning skills, with the ability to meet tight deadlines and manage competing demands effectively without close support;
- A developing track record of peer-reviewed publications in international journals;
- Excellent communication skills both written and verbal, and the ability to communicate your research at national and international conferences;
- A proven ability to work well both independently 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 of working on regularisation by noise phenomena;
- Familiarity with Malliavin calculus or Stochastic Sewing techniques.



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 Konstantinos Dareiotis, Lecturer
Email: K.Dareiotis@leeds.ac.uk

OR

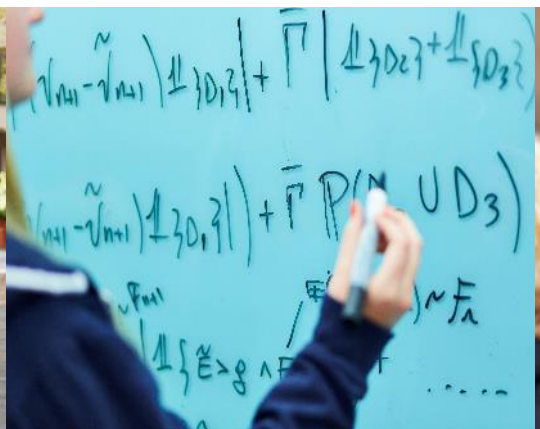
Dr Khoa Le, Lecturer
Email: K.Le@leeds.ac.uk

Additional information

Please note: If you are not a British or Irish citizen, you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Faculty and School Information
Further information is available on the research and teaching activities of the Faculty of Engineering & Physical Sciences, and the School of Mathematics.

A diverse workforce
As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to


Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN Silver 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
We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our Working at Leeds information page.

Information for disabled candidates
Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page or by getting in touch with us at hr@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.