

READER IN APPLIED MATHEMATICS

Job Ref: REQ171163

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

The [Interdisciplinary Centre for Mathematical Modelling \(ICMM\)](#) is a newly established Research Centre in the [School of Science](#) that is anticipated to grow into a [Beacon of research excellence](#) in the University. The Centre, which is to be led by Professor Tapio Ala-Nissila, will initially focus on multiscale modelling of materials (including soft matter), (open) quantum systems and related emerging technologies. Successful candidates will provide major research and wider academic leadership within the Centre and beyond. Successful candidates will also be expected to contribute to teaching in the [Department of Mathematical Sciences](#), a constituent department of the School of Science, and other activities in the School.

Job Description

Please note that this is a generic job description for the position of Reader.

Job Grade

Research, Teaching and Enterprise Grade 8

Job Purpose

To take a leading role in developing and enhancing the research, teaching and enterprise activities in the School of Science in support of the University's Strategy, Building Excellence.

To engage personally with those activities, adding to the School's international research reputation.

Job Duties

Academic Leadership

- To pursue excellence in research, teaching and enterprise and to inspire others to do the same.
- To lead and participate in internal and external networks to foster collaboration and to promote the School and its constituent parts, and the University, nationally and internationally.
- To monitor the external environment and ensure that the School and University capitalise on emerging opportunities and to review the scope of current academic provision.

Research

- To pursue a personal research programme consistent with the research priorities of the Interdisciplinary Centre for Mathematical Modelling in the School of Science that increases the global visibility and reputation of the University.
- To secure external research funding.
- To supervise and manage research projects.
- To publish the outcomes of research in outlets of international standing.
- To attend and contribute to the organisation of major international conferences.
- To supervise postgraduate students at Masters and Doctoral levels.
- To initiate, lead and collaborate in research initiatives with colleagues both within the School and externally.
- To initiate, lead and collaborate in research initiatives with other HEIs and other relevant bodies.

Teaching

- To lead colleagues in the School in a developing capacity to deliver an exceptional learning environment for students.
- To teach and inspire undergraduate and postgraduate students and to conduct associated assessments.
- To provide academic and pastoral support to undergraduate and postgraduate students.
- To promote the use of a range of methods and techniques in teaching, learning and assessment.
- To engage in the evaluation and development of modules for which you have responsibility, in terms of content, delivery and assessment.
- To be responsible for the design and content of specific areas of teaching and learning within the School's undergraduate and postgraduate programmes.
- To lead colleagues in the continuous review and development of the School's taught programmes and the curriculum.

Enterprise

- To initiate and lead engagement with business, public and voluntary organisations through knowledge exchange activities such as student projects and placements, research collaboration, consultancy and specialist training.
- To create social, cultural and economic impacts from academic, especially research, activity.
- To secure external funding in support of these activities.
- To seek opportunities for the commercialisation of research and the formation of social enterprises.

Related Activities and Functions

- To work effectively with relevant administrative, technical and academic staff in the School and across the University.
- To carry out specific administrative roles and functions as may be reasonably required.
- To take part in and, on occasion, act as chair of one or more of the School's committees.
- To engage in training programmes in the University (e.g. through Staff Development) which are consistent with your needs and aspirations and those of the School.
- To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.
- To engage fully with the annual Performance and Development Review (PDR) process.

Points to Note

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

Special Conditions

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Respecting Diversity and, where appropriate, Recruitment and Selection.

Organisational Responsibility

Reports to the Dean of Science.

Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application.

Stages of assessment are as follows:

- 1 – Application
- 2 – Skype or telephone interview
- 3 – Presentation to Staff and Students
- 4 – Interview

Essential Criteria

Area	Criteria	Stage
Experience	Evidence of academic leadership, e.g. project management, leading collaborations, managing staff and/or managing budgets.	1,4
	A sustained and continuing record of excellence which has contributed to the furtherance of knowledge in mathematical modelling consistent with the needs of the Interdisciplinary Centre for Mathematical Modelling, and is recognised by an established international reputation in that area.	1,3,4
	Experience of working in an internationally recognised academic research environment, including significant experience at post-doctoral level.	1
	Evidence of authoring a substantial body of original work, in the highest quality refereed academic journals.	1
	Extended experience of successfully supervising the projects of taught and research students or company staff at equivalent levels.	1,4
	Extended experience of presenting research work at international conferences, including in an invited capacity.	1
	Experience of teaching and assessment at undergraduate and postgraduate level and of curriculum development.	1,4
Skills and abilities	Demonstrated ability to develop a major original research programme on your own initiative and to persuade others of its importance.	2,4
	Demonstrated ability to secure substantial research funding and/or enterprise funds from external sources.	1,2,4
	Knowledge of research and enterprise funding opportunities in UK HE and understanding of how to secure funding.	2,4
	Excellent communication and interpersonal skills which give you the ability to engage with students, colleagues, business and other agencies.	1,2,3,4
	Experience of leading a team.	1,2
Training	Commitment to and evidence of continuing professional development, including willingness to work towards obtaining Fellow of the Higher Education Academy, if not held already.	1,2
Qualifications	Relevant PhD or equivalent experience.	1
Other	Commitment to observing the University's Equal Opportunities policy at all times.	1,2

Desirable Criteria

Area	Criteria	Stage
Experience	Experience of work in or in collaboration with external organisations, e.g. industry, charities, etc.	1
Skills and abilities	Demonstrated ability to create social/cultural/economic impacts from professional activity.	2,4
	A sound understanding of the structure of universities and issues facing the UK higher education sector, for example: <ul style="list-style-type: none">• Research funding opportunities in UK HE.• The challenges faced in recruiting students to UK HE.	1,2,3

Conditions of Service

The position is full time and open-ended, commencing 1 September 2018 or as soon as possible thereafter. Salary will be on Research Teaching and Enterprise Grade 8 £50,618 to £62,218 per annum, at a starting salary to be confirmed on offer of appointment. Subject to annual pay award.

The appointment will be subject to the University's normal Terms and Conditions of Employment for Academic and Related staff, details of which can be found [here](#).

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available [here](#).

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available [here](#).)

In addition, the University is supportive, wherever possible, of flexible working arrangements.

We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. The DMS, together with the Mathematics Education Centre, holds a Silver Athena SWAN award. For further information on Athena SWAN see <http://www.lboro.ac.uk/services/hr/athena-swan>.

Informal Enquiries

Informal enquiries should be made to **Prof Tapio Ala-Nissila** by email at T.Ala-Nissila@lboro.ac.uk

Applications

The closing date for receipt of applications is **28 January 2018**.