THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

FACULTY OF SCIENCE & ENGINEERING

SCHOOL OF NATURAL SCIENCES

DEPARTMENT OF MATHEMATICS

POSTDOCTORAL RESEARCH ASSOCIATE IN MATHEMATICS

VACANCY REF: SAE-030200

Salary:	Grade 6, £37,694 - £46,049 per annum, depending on relevant experience
Hours:	Full time
Duration:	Fixed term available from 1 January 2026 for 3 years
Location:	Oxford Road, Manchester

Enquiries about the vacancy, shortlisting and interviews:
Name: Dr Florian Eisele
Email: florian.eisele@manchester.ac.uk

Job Description

Applications are invited for the above post, to start on or after 1/1/2026 for a fixed term of three years.

The successful applicant will work with Dr Florian Eisele on the EPSRC funded project “Group representations: orders, lattices and deformations”. This project aims to study modular and integral representations of finite groups using methods coming from the representation theory of finite-dimensional algebras, in particular deformation theory. It also aims to further develop the modular representation theory of profinite groups. A background in the representation theory of either algebras or finite groups, or a background in profinite groups would be desirable.

The postholder will have access to extensive opportunities and training to develop their career as a research mathematician. The position carries no teaching obligation, but if desired there may be opportunities to conduct a limited amount of teaching for career development reasons. All staff are expected to adhere to all policies and procedures of the University including those relating to Equal Opportunities, Harassment, Health and Safety, and Smoking at Work.

Person Specification

It is **essential** that the individual appointed has:

- (or expects shortly to obtain) a PhD or equivalent research experience in mathematics or a closely related discipline;
- research experience in an area of mathematics of relevance to the project (e.g. algebra, representation theory or group theory);
- a willingness and ability to learn rapidly any technical background knowledge required for the project which they do not already possess;
- strong communication skills in written and spoken English;
- a personal commitment to equality, diversity, inclusion and accessibility, and a willingness to work with colleagues from diverse backgrounds.

It is **desirable** that the individual appointed has:

- research experience in the representation theory of finite groups, finite-dimensional algebras or profinite groups;
- a developing track record of internationally excellent publications, commensurate with their career stage.

Background

Manchester is the largest city in Northern England, with a metropolitan area population of over 2.5 million. Traditionally a commercial and industrial powerhouse, and birthplace of the industrial revolution, today it is also a cosmopolitan centre of education, media, arts and sport. Internationally famed for spectator sport and nightlife, it also has world-class facilities for music, participation in sport, arts and shopping. Direct rail links connect to cities across the UK, and the international airport provides direct flights across Europe and to major hubs worldwide. Just outside the city, the Peak District National Park provides some of the country's best-loved terrain for outdoor activities, while the Yorkshire Dales, Snowdonia and Lake District National Parks are also easily accessible.

The **University of Manchester** (www.manchester.ac.uk) was formed in 2004 by combining the Victoria University of Manchester and UMIST. It is the largest non-federal university in the UK, with an annual income of over £1.2 billion, over 12,000 staff and over 45,000 students. It and its predecessor institutions have a distinguished history of research and teaching, tracing back to 1824 and having produced 25 Nobel laureates. Research highlights include Rutherford's work on splitting the atom (leading to the 1908 Nobel prize for physics), the world's first stored-program computer (the Manchester University Mark I), the world's first steerable radio telescope (at Jodrell Bank), the birth of chemical engineering, and most recently the discovery of graphene (leading to the 2010 Nobel prize for physics). The University has more than half a million alumni in 190 countries.

The **Department of Mathematics** (www.maths.manchester.ac.uk) is one of the largest integrated mathematics departments in the UK, with around 95 permanent academic staff, 40 research assistants and fellows, over 1,000 undergraduate students and 250 postgraduate students. Based in the purpose-built Alan Turing Building, the Department provides a friendly, supportive and collegial environment that fosters world-class research and teaching. In the 2021 Research Excellence Framework, 99.5% of the Department's research was rated as internationally excellent or world-leading

The University of Manchester

The Pure Mathematics Group within the Department is a vibrant research community with 25 permanent academic staff, around 12 early-career research fellows and assistants, and numerous PhD students. It has an extensive programme of activities including regular seminars in algebra, geometry, analysis and dynamics, mathematical logic, number theory and semigroup theory, as well an annual programme of graduate-level courses and specialist reading groups.

Families and Work-life Balance. The Department and University are committed to the well-being and work-life balance of all staff. We have a package of family-friendly policies covering flexible working, career breaks and entitlement to paid maternity, paternity and adoption leave. For more details on these and other benefits see http://www.manchester.ac.uk/connect/jobs/benefits-working-here/. The Department is fully committed to Athena SWAN principles to promote women in science and is a supporter of the LMS Good Practice Scheme; for more details of our activities relating to Social Responsibility see http://www.maths.manchester.ac.uk/connect/social-responsibility/. This is a full time post but applications from individuals seeking part time, job share or flexible working arrangements are welcome and will be accommodated where compatible with the needs of the project.