RESEARCH FELLOW

DEPARTMENT/UNIT  School of Mathematics

FACULTY/DIVISION  Faculty of Science

CLASSIFICATION  Level A

DESIGNATED CAMPUS OR LOCATION  Clayton campus

ORGANISATIONAL CONTEXT

At Monash, work feels different. There's a sense of belonging, from contributing to something groundbreaking – a place where great things happen. You know you’re part of something special and purposeful because, like Monash, your ambitions drive you to make change.

We have a clear purpose to deliver ground-breaking intensive research; a world-class education; a global ecosystem of enterprise – and we activate these to address some of the challenges of the age, Climate Change, Thriving Communities and Geopolitical Security.

We welcome and value difference and diversity. When you come to work, you can be yourself, be a change-maker and develop your career in exciting ways with curious, energetic, inspiring and committed people and teams driven to make an impact – just like you.

Together with our commitment to academic freedom, you will have access to quality research facilities, infrastructure, world class teaching spaces, and international collaboration opportunities.

We champion an inclusive workplace culture for our staff regardless of ethnicity or cultural background. We have also worked to improve gender equality for more than 30 years. Join the pursuit of our purpose to build a better future for ourselves and our communities – #ChangeIt with us.

The five Schools of the Faculty of Science offer a large and diverse range of disciplines in undergraduate and postgraduate courses. Ten Schools from other university faculties contribute to science teaching at all levels, allowing students to choose their studies from physical, biological, biomedical, behavioural, environmental, mathematical and computer sciences. The Faculty of Science has a strong research reputation. The faculty’s research spans the theoretical to the applied, contributes to new knowledge and technologies, and challenges how we interact with the world. To learn more about the Faculty of Science, please visit our website: www.monash.edu/science/.
The School of Mathematics is one of the largest of the five Schools in the Faculty, and has close working collaborations with other Schools/Departments such as Physics and Astronomy, Earth, Atmosphere and Environment as well as other Faculties such as Business and Economics, Medicine, Information Technology and Engineering as well as the Monash Data Futures Institute. The School has strong links with outside institutions such as CSIRO, the Defence Science and Technology Organisation, and the National Australia Bank and a large number of research institutes and universities around the world.

The School is multidisciplinary with very active groups in algebra and discrete mathematics, analysis and geometry, topology, applied mathematics, financial mathematics, fluid dynamics, statistics and stochastic processes, numerical analysis and scientific computing, PDEs, operations research, optimisation, machine learning, and mathematical biology. The School provides undergraduate teaching for students in the Faculties of Science, Engineering and Information Technology, as well as postgraduate training in its key areas of research. The School has approximately 60 Academic and Research staff, 120 Teaching Associates, 6 Professional staff, 60 PhD and 60 Masters Students.

POSITION PURPOSE

A Level A research-only academic is expected to contribute towards the research effort of the University and to develop their research expertise through the pursuit of defined projects relevant to the particular field of research.

The Research fellow will work in a research topic fitting with the low-dimensional topology group at Monash. Current lines of research include, but are not restricted to: interactions between low-dimensional and quantum topology, hyperbolic geometry, knot theory, and computational topology.

Reporting Line: The position reports to Professor in the School of Mathematics

Supervisory Responsibilities: Not applicable

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level A research-only academic may include:

1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference and seminar papers and publications from that research

2. Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise

3. Limited administrative functions primarily connected with the area of research of the academic

4. Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff

5. Occasional contributions to teaching in relation to their research project(s)

6. Conduct of advanced research procedures

7. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees

8. Advice within the field of the staff member’s research to postgraduate students
9. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
   - a doctoral qualification in Mathematics or a closely related field, with a strong background in low-dimensional topology

Knowledge and Skills

2. Demonstrated analytical and manuscript preparation skills; including a track record of refereed research publications
3. Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
4. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines
5. Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents
6. A demonstrated awareness of the principles of confidentiality, privacy and information handling
7. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted
- A current satisfactory Working With Children Check is required

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.