



# RESEARCH FELLOW, PROBABILITY THEORY

<b>DEPARTMENT/UNIT</b>	School of Mathematical Sciences
<b>FACULTY/DIVISION</b>	Faculty of Science
<b>CLASSIFICATION</b>	Level A
<b>WORK LOCATION</b>	Clayton campus

## ORGANISATIONAL CONTEXT

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Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at [www.monash.edu](http://www.monash.edu).

The **Faculty of Science** works through frontiers via our research, teaching and our partnerships with industry, government and individual supporters. Our five Schools 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. In terms of research, our respected researchers are at the top of their game. Their work 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/](http://www.monash.edu/science/).

The **School of Mathematical Sciences** is one of the largest of the six Schools in the Faculty, and has close working collaborations with other Schools/Departments such as Physics and Astronomy, Earth, Atmosphere, Environment, Computer Science; and other faculties such as Business and Economics, Arts, Medicine, IT and Engineering. 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 provides undergraduate teaching for students in the Faculties of Science, Engineering, Information Technology and Pharmacy and Pharmaceutical Sciences, as well as postgraduate training in its key areas of research. The School is multidisciplinary with very active groups in algebra and discrete mathematics, analysis and geometry, applied mathematics, fluid dynamics, statistics and stochastic processes, numerical analysis and scientific computing, operations research, mathematical biology.

## POSITION PURPOSE

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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 successful applicant will undertake research in probability theory and/or statistical mechanics, working closely with Dr Andrea Collecchio, A/Prof Tim Garoni and A/Prof Kais Hamza. The position will be funded by ARC Discovery Project DP180100613, and will involve studying the behaviour of specific classes of random walks with long memory.

**Reporting Line:** The position reports to the Senior Lecturer

**Supervisory Responsibilities:** Not applicable

**Financial Delegation:** Not applicable

**Budget Responsibilities:** Not applicable

## KEY RESPONSIBILITIES

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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. 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
7. Advice within the field of the staff member's research to postgraduate students

## KEY SELECTION CRITERIA

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### Education/Qualifications

1. The appointee will have:
  - A PhD in mathematics or a related discipline from a recognised university; or
  - equivalent qualifications and research experience in the area; or
  - an equivalent combination of relevant experience and/or education/training

### Knowledge and Skills

2. Ability to solve complex problems by using discretion, innovation and the exercise diagnostic skills and/or expertise
3. Demonstrated record of publications in high-quality journals.
4. Excellent written communication and verbal communication skills with proven ability to produce clear, succinct reports and documents

5. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines

## **OTHER JOB RELATED INFORMATION**

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- 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

## **LEGAL COMPLIANCE**

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Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.