



# RESEARCH FELLOW

DEPARTMENT/UNIT	School of Mathematical Sciences
FACULTY/DIVISION	Faculty of Science
CLASSIFICATION	Level B
WORK LOCATION	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 B research-only academic is expected to carry out independent and/or team research within the field in which they are appointed and to carry out activities to develop their research expertise relevant to the particular field of research.

The Research Fellow will undertake research on combinatorics, contributing to the Australian Research Council funded project DP150100506 “Matchings in combinatorial structures”.

**Reporting Line:** The position reports to the Professor and Senior Lecturer within the School of Mathematical Sciences

**Supervisory Responsibilities:** Not applicable

**Financial Delegation:** Not applicable

**Budget Responsibilities:** Not applicable

## KEY RESPONSIBILITIES

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

1. The conduct of research both independently and under the guidance of Professor Wanless and Associate Professor Horsley in the area of combinatorics
2. Involvement in professional activities including, subject to availability of funds, presentations and attendance at conferences and seminars in the field of expertise
3. Preparation of results for publication in high quality combinatorics journals
4. Limited administrative functions primarily connected with the area of research of the academic
5. A light teaching load in any area of mathematics, as dictated by the needs of the School
6. Participation in weekly combinatorics research group meetings at Monash
7. Assistance in advising honours and postgraduate students working on the research project

## 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

### Knowledge and Skills

2. Experience in two or more research environments
3. Strong problem solving ability and evidence of innovation
4. Solid knowledge of the foundations of mathematics, including combinatorics
5. Excellent written communication and verbal communication skills with proven ability to produce clear and tight proofs
6. Proficiency with LaTeX
7. Well-developed planning and organisational skills, with the ability to prioritise multiple tasks and set and meet deadlines
8. Experience of publication of mathematics in high-quality journals
9. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

## OTHER JOB RELATED INFORMATION

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- 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

## **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.