



## Position description

### Senior Lecturer in Pure Mathematics

Position number	50100774
Department/Unit	School of Mathematical Sciences
Faculty/Division	Faculty of Science
Classification (salary rates)	Level C
Employment type	Continuing, Full-time
Work location	Clayton campus
Date document created or updated	25 Jan 2013

### Position purpose

The Senior Lecturer is expected to make significant contributions to the pure mathematics teaching effort of the University. An academic at this level is also expected to play a major role in scholarship, research and/or professional activities.

- **Reporting line:** The position reports to the Head of School, School of Mathematical Sciences
- **Supervisory responsibilities:** Supervision of postgraduate research students and casual staff as required
- **Financial delegation and/or budget responsibilities** including value of assets managed - Nil

## Organisational context

Monash University is an energetic and dynamic university committed to quality education, outstanding research and international engagement. A member of Australia's Group of Eight research intensive universities, it seeks to improve the human condition and is committed to a sustainable future. Monash has six campuses in Victoria, a campus in Malaysia, a campus in South Africa, a centre in Prato, Italy, and numerous international partnerships and cooperative ventures.

Monash University has approximately 63,000 equivalent full-time students spread across its Australian and off-shore campuses, and approximately 7,200 full-time equivalent staff (academic and professional).

The **Faculty of Science**, based at Clayton and Gippsland, has a total enrolment of approximately 3,000 students. Six 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.

The **School of Mathematical Sciences** is located in the Faculty of Science and 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, principally algebra and discrete mathematics, analysis and geometry, astrophysics and general relativity, atmospheric science and geophysical fluid dynamics, computational mathematics, statistics and stochastic processes, operations research and mathematical biology. There are 36 academic staff in the School, 32 research staff and 3 administrative staff. The total undergraduate EFTSU for the School is currently more than 925 and the total postgraduate EFTSU is about 54.

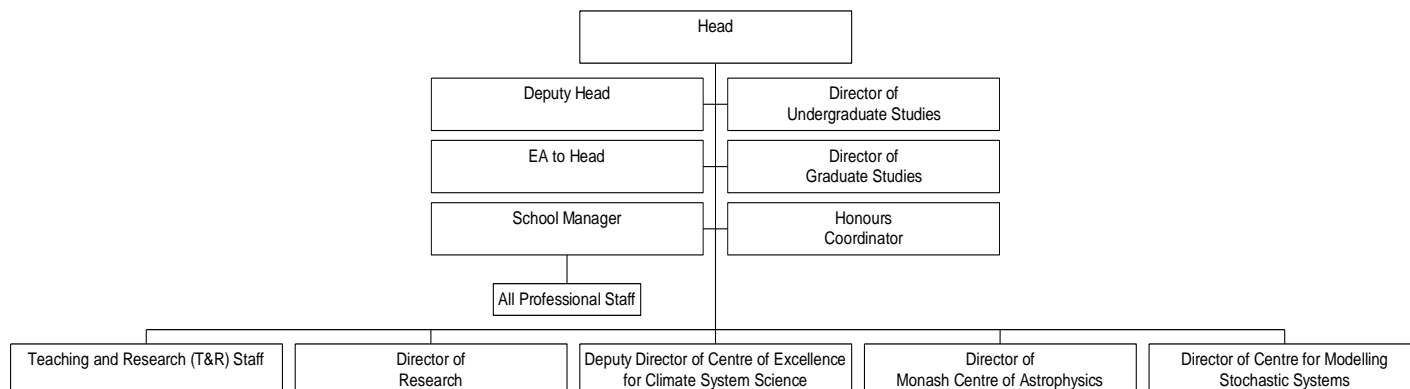
The School of Mathematical Sciences is one of the largest of the six Schools in the Faculty, and has close working collaborations with other Schools/Departments such as Physics, Geosciences, Geography, Computer Science; and other faculties such as Business and Economics, Arts, Medicine, IT and Engineering.

The School has strong links with outside institutions such as CSIRO, the Bureau of Meteorology, the Defence Science and Technology Organisation, and the National Australia Bank and a large number of research institutes and universities around the world. In 2013, MAXIMA will be established to increase the School's engagement with industry and researchers from interdisciplinary areas with interesting mathematical problems.

The School itself is multidisciplinary with very active groups in Algebra and discrete mathematics, Analysis and geometry, Applied Mathematics, Astrophysics and general relativity, Atmospheric science and geophysical fluid dynamics, Statistics and stochastic processes, Computational mathematics, Operations research, Mathematical biology. Much of the research in the School is conducted through the research centres, namely the Monash Centre for Astrophysics (MOCA), the Centre for Modelling of Stochastic Systems (CMSS), the Australian Research Council's Centre of Excellence for Climate System Science, 3D ALIVE (Applied Laboratory for Immersive Visualisation Environment), and MAXIMA (Monash Academy for Cross and Interdisciplinary Mathematical Applications).

## Organisational Chart

### School of Mathematical Sciences



## Key result areas and responsibility

The incumbent is expected to provide strong strategic support to the School of Mathematical Sciences through:

- The conduct of tutorials, practical classes, demonstrations and workshops
- Initiation and development of course material;
- Course coordination;
- The preparation and delivery of lectures and seminars;
- Supervision of major honours or postgraduate research projects;
- Supervision of the program of study of honours students and of postgraduate students engaged in course work;
- The conduct of research;
- Significant role in research projects including, where appropriate, leadership of a research team;
- Involvement in professional activity;
- Consultation with students;
- Broad administrative functions
- Marking and assessment;
- Attendance at departmental, school and/or faculty meetings and a major role in planning or committee work.

## Key selection criteria

### Essential

1. PhD in pure mathematics
2. Established record of outstanding research consistent with the strengths and strategic directions of the School
3. An established record of research publications
4. Experience in the supervision of postgraduate research students
5. Demonstrated ability to earn income through external research granting bodies
6. Demonstrated ability to develop and deliver innovative and exciting teaching in mathematics to students at all levels and backgrounds
7. Demonstrated capacity to work constructively and collaboratively with colleagues in furthering the aims of the School
8. Demonstrated oral and written communication skills
9. Demonstrated capacity to represent the School and the discipline in their dealings with internal and external groups

## Other job related information

- Travel (e.g. to other campuses of the University)
- Peak periods of work during which the taking of leave may be restricted

## Legal compliance

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
- Staff/Student Relationships