SCHOLARSHIP OPPORTUNITIES

School of Mathematical Sciences

Pursue pure mathematics at the University of Adelaide with a number of prestigious scholarships available for talented international candidates

adelaide.edu.au

seek LIGHT

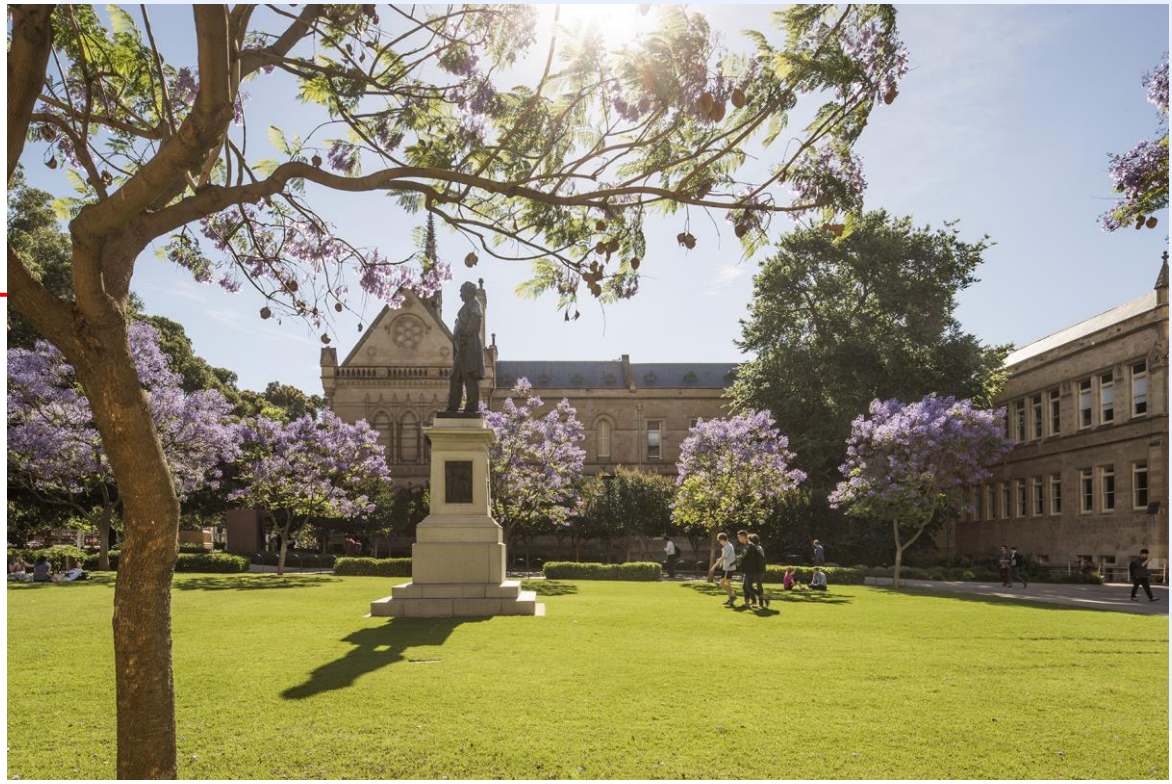
Ranked in the top one per cent of universities globally, the University of Adelaide is a world-class research and teaching institution centred on discovering new knowledge, pursuing innovation and preparing the educated leaders of tomorrow.

As Australia's third oldest university, we have a well-established reputation for excellence and progressive thinking.

We recognise exceptional people as one of our greatest assets. Adelaide has over 100 Rhodes Scholars and five Nobel Laureates among its distinguished alumni. We attract academic staff who are global leaders in their fields, along with the best and brightest students, who graduate equipped to embark on a fulfilling career.

Our researchers are committed to solving the world's grandest challenges and making a significant impact on the economy, health, public policy and the quality of life. Research takes place across specialist institutes and centres, where over 1700 researchers work collaboratively, across disciplines, and in partnership with industry and government. Their excellence is recognised worldwide, with 99% of our research areas rated as 'world standard or above' in the latest Excellence in Research Australia' assessment.

Adelaide's diverse student body is represented by staff and students from more than 90 different countries, which provides the opportunity to build strong global networks.



North Terrace Campus

Why Mathematical Sciences at the University of Adelaide?

We are living in a time of rapid technological advancement. In the context of this disruption, mathematicians are driving sustainable global change and are front-and-centre in developing solutions to some of the world's greatest challenges.

The University of Adelaide has a proud tradition of excellence in mathematics, dating back to the founding of the University in 1875 and the appointment of Sir Horace Lamb as the first Elder Professor of Mathematics.

The school itself is home to several world-class research institutes, including the esteemed Institute for Geometry and its Applications, where students learn from internationally-renowned academics at the cutting-edge of research and discovery.

In today's highly technical environment, mathematicians are key drivers in developing the universal language required to describe, model and understand the world around them.

At the University of Adelaide, the School of Mathematical Sciences provides valuable training in rigour, logical thinking and mathematical sciences knowledge. Our graduates are highly regarded for their creativity, problem-solving abilities and research skills, and pursue successful careers in their chosen specialisation in a wide range of industries.

Recent successful graduates

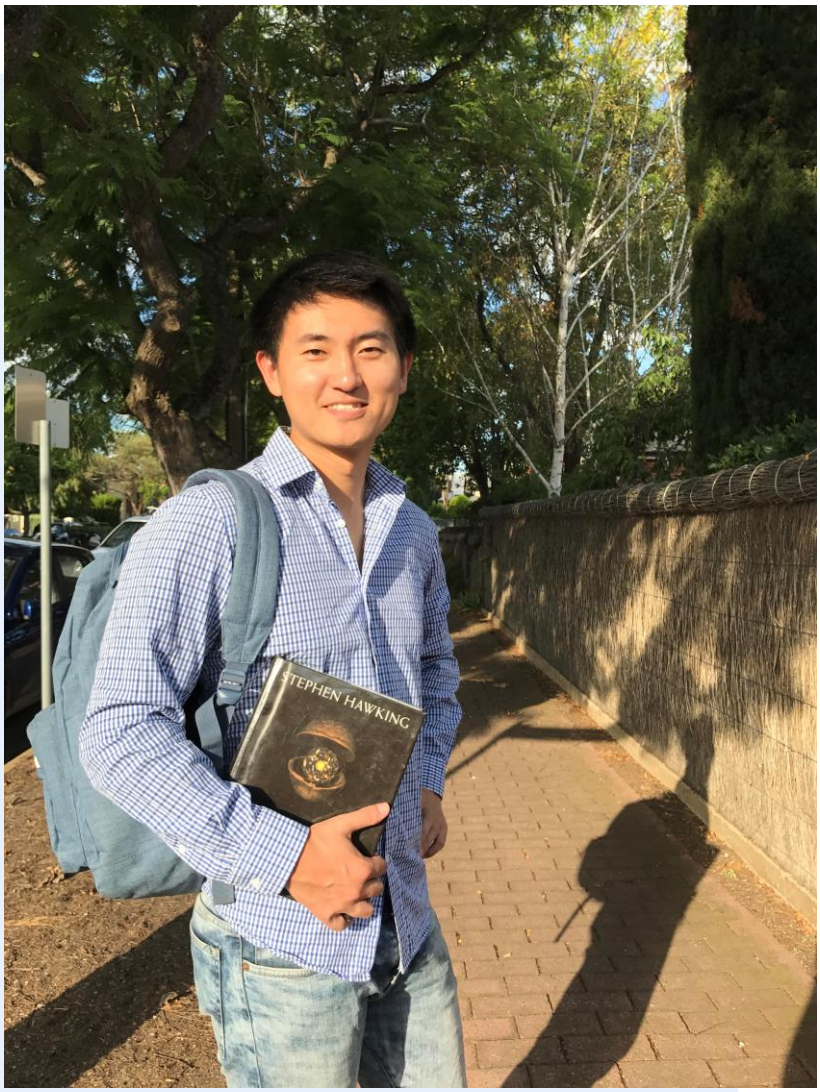
- Mr Michael Hallam (Varghese, Baraglia) 2017 B.H. Neumann Prize winner, Dean's letter
- Mr Hao Guo (Varghese, Wang) 2016 B.H. Neumann Prize winner, Certificate, Dean's letter
- Ms Kelli Francis-Staite (Murray, Leistner), Rhodes PhD Scholarship at Oxford University (2015)
- Mr Konrad Pilch (Varghese, Murray), PhD scholarship at Caltech (2015)

Ingkarni Wardli building, North Terrace Campus

"My first year here has been a challenging and extremely rewarding experience. I have had the chance to learn from and collaborate with world-class mathematicians working at the cutting edge, and enjoying being part of a supportive community of postgraduate students."

Hao Guo

PhD in Mathematical Sciences



PhD Laureate Scholarships

Work with one of the most knowledgeable and accredited academics at the University of Adelaide in this highly-acclaimed Laureate scholarship in Pure Mathematics.

Two PhD Scholarships focusing on Pure Mathematics are available within the School of Mathematical Sciences at the University of Adelaide, Faculty of Engineering, Computer and Mathematical Sciences.

- Two fixed term PhD scholarships – full-time, up to four years in Adelaide, Australia
- ARC-funded project entitled 'Advances in Index Theory', Australian Laureate Fellowship FL170100020
- Position open until filled

Pure Mathematics received the top ranking of 5 in ERA 2015, which makes it one of the premier departments in the country. It hosts the Institute for Geometry and its Applications, which is extremely active at organising workshops, lecture series and instructional schools that benefit HDR students and other staff.

Research topics include, but are not limited to, index theory of elliptic operators; geometric analysis, positive scalar curvature; mathematical gauge theory; mathematics of string theory; and mathematics of condensed matter physics.

Benefits

The scholarship includes a PhD scholarship of $27,082 per annum (2018 rate) for four years, available from 1 March 2019.

Application

Applicants should hold a first class Honours or a Masters degree in pure mathematics or mathematical physics. Equivalent international qualifications will also be considered.

You can request a copy of your application summary by emailing scholarships@adelaide.edu.au with 'Request for application summary' in the subject heading.

International applicants should apply for admission via the International online application form.

If you have any queries regarding this position, please contact Elder Professor Mathai Varghese.

Contact

- Mathai Varghese, Elder Professor of Mathematics
- Phone: +61 8 8313 4173
- Email: mathai.varghese@adelaide.edu.au
- Website: www.iga.adelaide.edu.au
- Profile: www.maths.adelaide.edu.au/mathai.varghese

Elder Professor Mathai Varghese

Professor Mathai Varghese is the Director of the Institute for Geometry and its Applications and the Elder Professor of Mathematics in the School of Mathematical Sciences at the University of Adelaide.

Professor Varghese is an Australian Laureate Fellow and Adjunct Professor of Mathematics within the Mathematical Sciences Institute at ANU and is one of the top academics within the university itself.

This Laureate scholarship opportunity will allow you the opportunity to work with Professor Varghese through a range of exciting research initiatives.

ARC-funded DECRA Scholarship

Are you an early career researcher that has a keen interest in the fields of geometry, functional analysis, topology, and representation theory?

An ARC-funded Postgraduate Scholarship in Pure Mathematics is available within the School of Mathematical Sciences at the University of Adelaide, Faculty of Engineering, Computer and Mathematical Sciences.

The scholarship, focusing on the pure mathematics fields mentioned above, is supported by the Australian Research Council through Dr Hang Wang's Discovery Early Career Researcher Award (DECRA) under the project name Index Theory for Spaces with Symmetries.

Applications are invited for this scholarship leading to the degree of Master of Philosophy or Doctor of Philosophy.

In the 1960s, Atiyah and Singer discovered an amazing link between topology and geometry from studying index theory of elliptic operators. Over the past 30 years, foundational progress has been made in understanding the geometry and topology of spaces with symmetries, with the help of operator algebra.

This motivates a research into index theory in relation with geometry, topology, representation theory and number theory. The MPhil and PhD project will fall in a broad context of these fields.

Application

Applicants must have a bachelor's degree, awarded or to be expected before June 2017, in Pure Mathematics, an excellent performance in the core courses in Pure Mathematics, such as differential geometry, topology and functional analysis, and a strong interest and motivation towards research in this field.

The Minimal requirement for English proficiency from the University of Adelaide must be satisfied for applicants whose first language is not English.

Stipend

The scholarship will be for up to three years and has a stipend of $25,406 per annum. It is likely to be tax exempt, subject to Australian Taxation Office approval.

Contact

- Dr Hang Wang, School of Mathematical Sciences
- Phone: +61 8 8313 5086
- Email: hang.wang01@adelaide.edu.au

Scholarship open until filled.

Mathematics students

PhD Scholarship

Pure Mathematics

This specific PhD research scholarship will be focused in an area related to the geometry and topology of moduli spaces associated to a Riemann surface.

A PhD Scholarship in Pure Mathematics, funded by a grant from the Australian Research Council, is available within the School of Mathematical Sciences at the University of Adelaide, Faculty of Engineering, Computer and Mathematical Sciences.

Field of Study

The project, which focuses on the geometry and topology of moduli spaces to a Riemann surface, may include, but is not limited to, moduli spaces of vector bundles; moduli spaces of Higgs bundles; applications to Langlands duality; and representation varieties of fundamental groups of surfaces.

A background in differential geometry, algebraic geometry or algebraic topology is desirable.

Eligibility

Applicants should have an Honours or Masters degree and satisfy the entry requirements for a Doctor of Philosophy degree at the University of Adelaide. Qualified international students will be eligible for a waiver to cover tuition fees.

Stipend

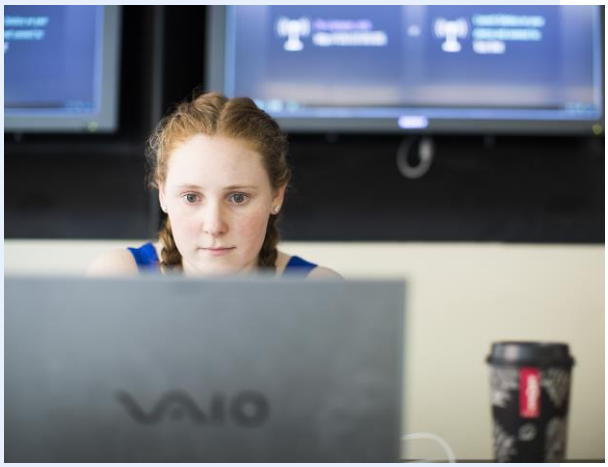
The Scholarship is for three years and has a stipend of AU$25,406 per annum.

Application

Interested candidates should send a CV and academic transcript to David Baraglia, Lecturer of Pure Mathematics.

- Email: david.baraglia@adelaide.edu.au
- Subject: "Application for ARC PhD Scholarship"

Scholarship open until filled.



Masters Scholarship

Pure Mathematics

Pure Mathematics received the top ranking of 5 in ERA 2015, making it one of the premier departments in the country – one of the core reasons why a Masters Scholarship in the field is highly competitive.

We A fixed term MPhil Scholarship, full-time for up to two years, is available within the School of Mathematical Sciences at the University of Adelaide, Faculty of Engineering, Computer and Mathematical Sciences.

It is an ARC-funded project called 'T-duality and K-theory: Unity of condensed matter and string theory'.

Pure Mathematics hosts the Institute for Geometry and its Applications, which is extremely active at organising workshops, lecture series and instructional schools that benefit HDR students and other staff. The IGA is headed by Elder Professor Mathai Varghese, who will jointly supervise the project with ARC DECRA Fellow Dr Guo Chuan Thiang.

Research topics include mathematical physics, with an emphasis on topological, geometric, analytic and operator algebraic methods in topological condensed matter physics, quantum theory and/or string theory.

Benefits

An MPhil scholarship of $27,082 per annum (2018 rate) for two years, available from 1 March 2018.

Application

Applicants should hold a good 3-year Bachelors degree or first class Honours degree in mathematical physics, pure mathematics, or theoretical physics with a strong mathematical emphasis. Equivalent international qualifications will be considered.

You can request a copy of your application summary by emailing scholarships@adelaide.edu.au with "Request for application summary" in the subject heading.

International applicants should apply for admission via the international online application form.

Contact

If you have any queries regarding this position, please contact Dr Guo Chuan Thiang.

- Dr Guo Chuan Thiang, ARC DECRA Fellow, School of Mathematical Sciences
- Email: guochuan.thiang@adelaide.edu.au

Scholarship open until filled.

For further enquiries

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