



THE UNIVERSITY OF
SYDNEY

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**Mathematical
Research
Institute**

Domestic Visitor Program – November 2020 round Terms and Conditions

Deadline for application: 11.59pm (Sydney time), Monday 30 November 2020

For visits within the period:¹ 1 March – 26 July 2021

Applications for visits not meeting the following conditions may be accepted in special circumstances with prior arrangement. Please direct questions to the Institute's Executive Director, Professor Anthony Henderson, smri.exec@sydney.edu.au.

- (1)** At the time of application, applicants must hold a PhD or equivalent degree, and must be employed by a university, institute, laboratory or other similar organisation located in Australia. If the application is successful, their employer would be expected to approve their research visit to SMRI and their entering into a research affiliation with The University of Sydney for the period of that research visit. Applicants who are not Australian citizens must hold an Australian visa of a class which would allow the research visit.
- (2)** Applicants should have an established program of research in the mathematical sciences ([ANZSRC Division 49](#)).
- (3)** Applicants should propose a research visit to SMRI, within the period specified for the application round, of at least 2 weeks' duration.
- (4)** A group of at most 4 applicants who propose to visit SMRI at the same time in order to collaborate on a research project may submit a single joint application. In this case each applicant must individually satisfy the above eligibility conditions.
- (5)** Applicants whose proposed projects involve collaboration with academic staff members of The University of Sydney must identify one such staff member who has agreed to be designated the host of their proposed visit. Hosts will be contacted to confirm their support for the visit, including any potential financial contribution, and their comments will be taken into account in assessing the benefit of the proposed visit.
- (6)** Applicants may nominate an academic referee who is not a host or co-applicant of the proposed visit and who is willing to be contacted by the Executive Director for their

¹ Please note that the visit dates of successful applicants may need to be reviewed subsequently to ensure compliance with University of Sydney policy and NSW COVID-19 guidelines.

confidential comments on the applicant's research track record, if requested. Members of the Scientific Advisory Committee of SMRI are eligible to act as referees, in accordance with the committee's policy on conflicts of interest, and provided they are not a host or co-applicant of the proposed visit.

Successful applications will be selected by the SMRI Scientific Advisory Committee, as named on the website, and other expert colleagues as required. The selection criteria are:

- Applicant's research track record, assessed relative to opportunity (taking into account time since PhD and any research career interruptions).
- Benefits of the proposed visit for Australian research in the mathematical sciences.
- Considerations of diversity, equity and inclusion in relation to, for example, field of research within the mathematical sciences, gender of applicant and host(s), and number of years post PhD of applicant and host(s).

Applications from female and gender-diverse researchers, and from researchers belonging to other groups which are underrepresented in the mathematical sciences, are particularly encouraged.

Successful applicants will be able to use a shared research office and the other facilities of SMRI in a manner which is compatible with NSW COVID-19 guidelines on physical distancing and hygiene. Applicants who are not normally based in Sydney may receive funding of up to A\$840 per week, for a maximum of 5 weeks, to assist with accommodation and other local expenses during their visit. In addition, they may obtain reimbursement of one return economy airfare or equivalent amount up to a maximum of A\$500. If required, they can be assisted by SMRI staff in locating suitable accommodation for their stay in Sydney, as well as childcare and school options for those travelling with children. Note that all benefits depend on a signed agreement with The University of Sydney, identity verification, and the presentation of receipts in the case of airfare reimbursement.

By submitting an application you consent that the information may be shared with SMRI staff and Scientific Advisory Committee members as well as with the nominated host and academic referees, if necessary. This information will not be used for any purpose other than the ranking and selection of applicants and the compiling of anonymised reports on the selection process. A list of successful applicants, with the dates and other details of their visits, will be posted on the Institute's website.

To apply, please email smri.exec@sydney.edu.au before the deadline with the following information and PDF attachments, for each applicant involved:

- Personal details: full name as used professionally, home (residential) address, telephone number, gender, Aboriginal or Torres Strait Islander status, disabilities requiring work-related adjustment (if any).
 - Primary six-digit Field of Research code in the [ANZSRC 2020 classification](#) (see below) and verbal summary of areas of research interest and expertise (comma-separated list, max 25 words).
 - Name and email address of academic referee (optional).
 - [Attached as a single PDF file] Up-to-date CV including current employment, date of PhD completion, details of any research career interruptions, and a full publication list.
 - [Attached as a single PDF file] 1–2 page outline of a proposed research visit to SMRI meeting the above conditions, including proposed arrival and departure dates, name and email address of University of Sydney host if appropriate, some details of the research project(s) you will work on at SMRI and any current or potential collaborators, and any other confirmed or potential sources of funding for the visit.
 - [Attached as a single JPEG or PDF file] Passport ID page.
 - [Attached as a single PDF file, for non-Australian citizens] Evidence of current visa status.
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ANZSRC 2020 – Division 49 Mathematical Sciences

Applied mathematics:

490101 Approximation theory and asymptotic methods
 490102 Biological mathematics
 490103 Calculus of variations, mathematical aspects of systems theory and control theory
 490104 Complex systems
 490105 Dynamical systems in applications
 490106 Financial mathematics
 490107 Mathematical methods and special functions
 490108 Operations research
 490109 Theoretical and applied mechanics
 490199 Applied mathematics not elsewhere classified

Mathematical physics:

490201 Algebraic structures in mathematical physics
 490202 Integrable systems (classical and quantum)
 490203 Mathematical aspects of classical mechanics, quantum mechanics and quantum information theory
 490204 Mathematical aspects of general relativity
 490205 Mathematical aspects of quantum and conformal field theory, quantum gravity and string theory
 490206 Statistical mechanics, physical combinatorics and mathematical aspects of condensed matter
 490299 Mathematical physics not elsewhere classified

Numerical and computational mathematics:

490301 Experimental mathematics

490302 Numerical analysis

490303 Numerical solution of differential and integral equations

490304 Optimisation

490399 Numerical and computational mathematics not elsewhere classified

Pure mathematics:

490401 Algebra and number theory

490402 Algebraic and differential geometry

490403 Category theory, K theory, homological algebra

490404 Combinatorics and discrete mathematics (excl. physical combinatorics)

490405 Group theory and generalisations

490406 Lie groups, harmonic and Fourier analysis

490407 Mathematical logic, set theory, lattices and universal algebra

490408 Operator algebras and functional analysis

490409 Ordinary differential equations, difference equations and dynamical systems

490410 Partial differential equations

490411 Real and complex functions (incl. several variables)

490412 Topology

490499 Pure mathematics not elsewhere classified

Statistics:

490501 Applied statistics

490502 Biostatistics

490503 Computational statistics

490504 Forensic evaluation, inference and statistics

490505 Large and complex data theory

490506 Probability theory

490507 Spatial statistics

490508 Statistical data science

490509 Statistical theory

490510 Stochastic analysis and modelling

490511 Time series and spatial modelling

490599 Statistics not elsewhere classified

Other mathematical sciences:

499999 Other mathematical sciences not elsewhere classified