



THE UNIVERSITY
of ADELAIDE



Faculty of Engineering, Computer and Mathematical Sciences

MODELLING THE MARGINAL ICE ZONE

Up for a challenge? Join us to work on a research project with the School of Mathematical Sciences

At a Glance

Who can apply?

- Australian Citizens
- Onshore International students

Funding body

- ARC grant funding

Program of Study available

- Doctor of Philosophy (PhD)

Total annual stipend amount

- \$28,597pa for 3 years

Start date

- Immediately

About the project

The PhD project is an opportunity to develop and implement state-of-the-art models of Antarctic sea ice that resolve the highly dynamic interface between the open ocean and sea-ice covered ocean, known as the marginal ice zone. The research is motivated by compelling evidence that the marginal ice zone has markedly dynamic and thermodynamic properties to the inner ice cover, and the importance of the marginal ice zone to the global climate system in the era of climate change.

The project involves collaborations in Australia (including the Australian Antarctic Division, CSIRO and Bureau of Meteorology) and overseas (including Washington and Otago). Opportunities are available for domestic and international travel, to participate in conferences and for research visits.

References

Golden et al, 2020, Notices of the American Math Society, doi.org/10.1090/noti2171

Alberello et al, 2020, J Geophys Res, doi.org/10.1029/2019JC015418

Bennetts et al, 2017, The Cryosphere, doi.org/10.5194/tc-11-1035-2017

Eligibility criteria

- The project is appropriate for STEM students interested in modelling and computation, and applications to Antarctic science.
- Programming skills are essential.

Benefits

- Access to authorised travel and research project funds available
- Work alongside world leading researchers
- Our CarST program: Free professional development to enhance your employability skills
- Collaborate with experts in the field.
- No Tuition fees! These are waived for eligible candidates
- Access state of the art technology
- Become a field expert and make a real and contribute to solving global challenges
- Publish your contributions and impact our communities and society

How to apply

- Complete an [expression of interest](#) and email together with a copy of your CV and transcripts to A/Prof Luke Bennetts luke.bennetts@adelaide.edu.au
- Once your initial eligibility assessment is approved, formally lodge an application for admission and scholarship via the Adelaide Graduate Centre 'How to Apply' [link](#). **Application dates are listed on the website.**

Researcher Profiles

- Use our [Researcher Profiles](#) to find out more about potential supervisors

More about ECMS

The Faculty of Engineering, Computer and Mathematical Sciences is home to world-class research institutes and centres, and internationally renowned academics at the cutting edge of research and discovery.

We are a thriving centre of learning, teaching and research in a vast range of engineering disciplines, computer science, machine learning and high-level mathematics as well as designing Human-centred, sustainable futures in our School of Architecture and Built Environments.

Many of our academic staff are leaders in their fields and graduates are highly regarded by employers.

Learn more about the Faculty of Engineering, Computer and Mathematical Science's Research capabilities at: <https://ecms.adelaide.edu.au/research-impact>

The University of Adelaide is an Equal Employment Opportunity employer. Women and Aboriginal and Torres Strait Islander people who meet the position requirements are strongly encouraged to apply.

FURTHER INFORMATION

For a confidential discussion contact:

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