



We seek a motivated individual to work with a team of statisticians and volcanologists as part of the multi-national, interdisciplinary research project *Transitioning Taranaki to a Volcanic Future*. The student will enroll for full-time study towards a PhD degree in the Department of Mathematics and Statistics at the University of Otago in Dunedin with co-supervisors from Massey University and the University of Auckland.

**Start date: The earliest start date is January 2021 (can be negotiated).**

**For international students, if NZ travel restrictions are still in place by the negotiated start date, the project can be started from abroad.**

**Part-time study: Part-time study is not permitted**

This project aims to use marked point processes to model eruption records and related geochemical data from a group of volcanoes that may share similar eruption features. The successful applicant should have some background knowledge in point process theory and Bayesian inference. Familiarity with Earth Sciences is preferable but not required. This project involves model development, simulation studies and some data analysis using the statistical software R under the supervision of Dr Ting Wang (Department of Mathematics and Statistics, University of Otago), Professor Mark Bebbington (Massey University), Dr Marco Brenna (Department of Geology, University of Otago), Professor Shane Cronin and Associate Professor Ingrid Ukstins (University of Auckland).

### **Eligibility**

Applicants should hold a BSc (Hons) or MSc in Statistics or a related discipline with a strong research interest.

Prospective applicants should first contact Dr Ting Wang ([ting.wang@otago.ac.nz](mailto:ting.wang@otago.ac.nz), [http://www.stats.otago.ac.nz/?People=ting\\_wang](http://www.stats.otago.ac.nz/?People=ting_wang)) and provide a covering letter explaining their interest in this project, a CV, a copy of full academic transcript, and details of two academic referees.