



Discriminating Seismic Sources during Subglacial Floods Based on Seismic Data Analysis



PhD Scholarship of up to 3 or 4 years

at the Chair of General Geophysics, University of Potsdam, Germany

In October 2015, the DFG Research Training Group “Natural Hazards and Risks in a Changing World” (<http://natriskchange.de>) was established at the University of Potsdam, in cooperation with the Freie Universität of Berlin, the German Research Centre for Geosciences GFZ and the Potsdam Institute for Climate Impact Research (PIK). NatRiskChange aims to develop methods that improve hazard and risk analyses and quantifications based on the transient, non-stationary nature of hazards and risks in response to changing natural and anthropogenically altered components of the earth system. Key scientific aims are the development, testing and pilot application of studies on the identification, quantification and prediction of transient natural hazards and associated risks. Earthquakes, floods, and mass movements are of major research interest.

Funded by the **Graduate School Scholarship Programme (GSSP)** of the **German Academic Exchange Service (DAAD)**, the **NatRiskChange Research Training Group** now offers a **full DAAD PhD scholarship** at the Institute of Geosciences of University of Potsdam, Germany for a **period of three years (or up to four years for candidates from developing countries)**. The related PhD project is entitled “**Discriminating Seismic Sources during Subglacial Floods Based on Seismic Data Analysis**”. Further subject-specific information can be obtained from Prof. Eva Eibl (eva.eibl@uni-potsdam.de)

The scholarship includes

- a monthly scholarship of € 1,200
- travel support and potential support for studies and research
- combined insurance (health, accident, liability)
- a research allowance of currently € 460 per year for scholarship holders from emerging countries, or € 230 per year for scholarship holders from industrialized countries
- under certain circumstances, grant holders may receive the following additional benefits: potential support for rent, family allowance (about € 200 child allowance per child and about € 275 marriage allowance)
- full funding for a German language course in Germany of up to 6 months preceding the scholarship
- a material resource and supervision allowance of currently € 1,000 per year, which is paid upon application to the host institution

The selected candidate will be fully integrated in the activities and the teaching curriculum of the NatRiskChange Research Training Group, and enjoy the vibrant international research environment in the Institute of Geosciences and Institute of Environmental Science and Geography at the University of Potsdam. The schedule and length of the language course will be determined after consultation with the selected candidates.

The candidates are required to have:

- an excellent Master’s degree in seismology, geophysics, hydrology, glaciology or closely related fields
- a proven background in data processing, seismological data analysis, fluid flow modelling
- good programming skills, e.g. in Python (ideally) or R or MATLAB
- experience with seismological data, time series analysis, earthquake location and if possible subglacial floods
- good English language skills

Formal requirements:

- upon nomination, the last final exam (master degree) must have been obtained no longer than six years ago,
- upon nomination, applicants must not have resided in Germany for more than 15 months.

Application

Applications should include the following components: a detailed CV, a letter of motivation, a brief research concept (ca. 2 pages) for the PhD project (focussing on a plan on how to improve the understanding of seismic signals associated with subglacial floods), a record of studies, master and bachelor certificates including a transcript of records, an English synopsis of the Master thesis, a list of publications, oral and/or poster presentations at conferences, and two letters of recommendation.

Applications can only be submitted through <https://www.geo-x.net/daad-gssp/>. The application should be uploaded in **one single PDF document** (< 10 MB) by **1 March 2021**. Applications per email will not be considered.

Based on the applications, the University of Potsdam will, in a first stage, nominate two to four candidates. These candidates will be required to submit a full application to the DAAD which will then, in a second stage, be evaluated by DAAD. Candidates will be informed in detail about the second stage in case they are nominated after the first stage. The actual scholarship and the related PhD study are envisaged to start in October 2021.

Handicapped applicants will be given preference in case of equal suitability. The NatRiskChange consortium strives to increase the proportion of women in research and specifically encourages females to apply for these positions.

