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**UNIVERSITÄT
BERN**

Climate and Environmental Physics, Sidlerstrasse 5, CH-3012 Bern

Faculty of Science

Physics Institute

Climate and Environmental Physics

The Division of Climate- and Environmental Physics, Physics Institute, University of Bern opens a position for a

PostDoc

The position is part of the SNF-funded CHARIBDIS-project which aims at improving and calibrating ice sheet models via the Antarctic radiostratigraphic record and will have a strong focus on model-data integration. The successful applicant will be part of the ice sheet modelling group at the University of Bern with many opportunities for collaboration and extended research visits internationally.

There are two key foci of the envisaged research:

- Development of a novel parameterization of basal friction informed by the isochronal structure of Antarctic drainage sectors.
- Investigation of dynamic ice sheet reorganizations during past climate transitions.

Background

The evolution of the Antarctic Ice Sheet during the coming centuries and millennia is highly uncertain. Its future path could make it the dominating driver of global sea level rise, thwarting even a complete loss of the entire Greenland Ice Sheet under the most dire climate scenarios. At the same time, the heuristics involved in the parameterization of current ice sheet models are insufficient to e.g. adequately capture dynamic Antarctic drainage sectors thus leading to large uncertainties in sea level projections. The successful candidate will improve upon physical descriptions of ice flow/basal drag in ice sheet models by combining high resolution ice sheet modelling and investigate ice dynamic responses of the Antarctic Ice Sheet during past climate transitions.

Qualifications

We are looking for a highly motivated researcher with a strong interest in the Cryosphere, model development and observational data. Applicants should have a degree in the field of Physics, Earth System Sciences, Mathematics or related disciplines. Mandatory requirements for the position are experience in programming (e.g. C++, Python, Matlab) and a strong background in physics and or mathematics. Good communication skills in English (both verbal and written), a robust publication track-record, and willingness to closely collaborate with colleagues at the University of Bern and beyond are expected.

The Climate and Environmental Physics Institute at the University of Bern offers a highly interdisciplinary research- and team-oriented work environment. Salary is according to the postdoctoral scale of the University of Bern and depends on experience. A small contribution to teaching in the Physics curriculum is expected.

Expected Start date 01.10.2023 or to be agreed.
Duration: 3 years, 80-100 %.

In order to receive full consideration, applications must be submitted before April 15th 2023 but the position will stay open until filled.

Your application is in one pdf-file and consists of a motivation letter, CV, a link to a PDF file of your PhD thesis, MSc and PhD certificates including evaluations and the names and addresses of at least two references. Please send the application or job-related inquiries to johannes.sutter@unibe.ch.

Bern, 7. März 2023