

The division of Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland, opens a position for a

PhD student in Antarctic Ice Sheet Modelling

This PhD is carried out in the framework of the groups of Climate and Environmental Physics and the Oeschger Center for Climate Change Research. The candidate will explore the changes in the Antarctic ice sheet and its interactions with the climate system throughout the past 3 million years using a state-of-the-art ice sheet model driven by reconstructions of past climates and global circulation model data. The work focuses on crucial climate periods in the past, such as the mid-Pliocene warm period (ca. 3.3 to 3.0 M years ago), the mid-Pleistocene transition (about 1 M to 0.8 M years ago) or the Last Interglacial (ca. 130.000-120.000 years ago). With the same model, the candidate will also investigate the future evolution of the Antarctic Ice Sheet under a variety of climate scenarios.

We are looking for a highly motivated student with a strong interest in climate modelling and understanding past climate change, including the role of ice sheets in the climate system. Experience in using climate models will be an advantage. The position requires a Master in Physics, Geosciences, Environmental/Climate Sciences, Meteorology, Oceanography, Material Sciences, Mechanical Engineering, Computer Science, or similar. Advanced programming skills in e.g. C++, C++, Python, Fortran, R are beneficial. Demonstrated writing and communication skills in English, as well as the commitment to collaborate within an interdisciplinary framework are essential, in particular with fellow scientists at Climate and Environmental Physics who also use the Bern3D model.

Salary is according to the guidelines of the Swiss National Science Foundation and the University of Bern guidelines, with funding guaranteed for a maximum of 4 years. Upon qualification, a small teaching position within Physics can be additionally offered.

Application:

Please upload your application in one pdf-file, that will include a motivation letter, CV, a link to a PDF file of your Master's thesis, an academic transcript of your studies and contact details for at least two academic references at

https://fileserverserver.climate.unibe.ch/upload_apps.php?jobid=icesheet_2021

The position is open now until a suitable candidate is found.

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