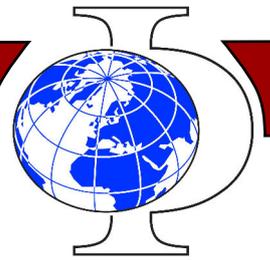




# UNIVERSITÄT HEIDELBERG INSTITUT FÜR UMWELTPHYSIK

Im Neuenheimer Feld 229, 69120 Heidelberg  
www.iup.uni-heidelberg.de



Atmosphere and  
Remote Sensing

Aquatic Systems and  
Biogeochemical  
Cycles

Radiometry and  
Paleoclimate

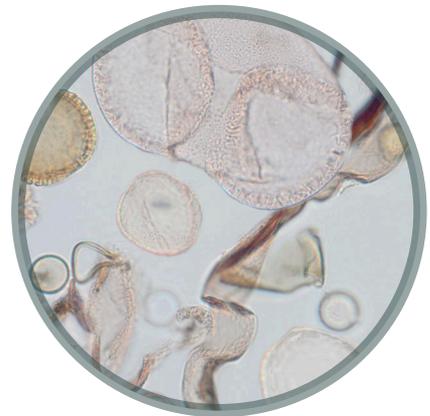
Terrestrial Systems  
and Geophysics

Air-Sea  
Interactions

Within the research project "State and timescale dependency of past climate variability from the last Glacial to present day (STACY)" funded by the Emmy-Noether Programme of the German Research Foundation (DFG) applications are invited for:

## 1 Postdoctoral researcher (f/m)

The successful candidate will develop a multi-proxy inverse modeling framework to provide palaeoclimate proxy-based constraints on the amplitudes of past climatic and environmental change. Starting with existing Bayesian Hierarchical models, forward models for pollen, speleothems and ice cores are assessed and extended. A clean and modular formulation of these models form the basis for a successful inversion of these models, to provide multi-proxy constrained estimates for past temperature and precipitation changes. This challenging task, at the forefront of data-based paleoclimate science, requires a background in statistics, and programming skills, and, ideally, experience in Bayesian inference.



*Above: Mid-Holocene pollen spectrum from Sihailongwan maar lake (photo courtesy of M. Stebich).*

### Requirements:

- Completed PhD, or close to completion
- Experience in numerical techniques
- Programming skills and scripting in high- and/or low-level languages
- Strong motivation and the ability to carry out research in a dynamic team including students
- Experience with statistics, in particular Bayesian modeling techniques, are an advantage, as are familiarity with paleo-ecological or paleo-climatological proxies and -models, and knowledge of UNIX/Linux platforms.

The position is initially offered for two years, starting on October 1st 2018, or soon thereafter, with possibility for renewal. Payment will be in accordance with experience following the German public service positions (TVöD E13), which includes social security plans. Conditions of employment follow the rules of Heidelberg University and the German civil service.

### Contact:

To apply, please submit a cover letter, a CV, a short statement of research interests, a list of publications and the names and contact details of two potential references in one pdf-file (max 10 MB) to Kira Rehfeld (krehfeld@iup.uni-heidelberg.de).

Application deadline: August 15<sup>th</sup> 2018, 1PM CET.

Please address enquiries to:

Dr. Kira Rehfeld (krehfeld@iup.uni-heidelberg.de).

