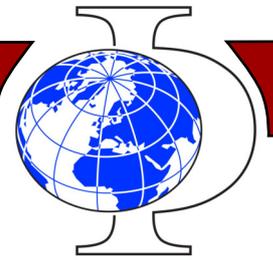




UNIVERSITÄT HEIDELBERG INSTITUT FÜR UMWELTPHYSIK

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Atmosphere and
Remote Sensing

Aquatic Systems and
Biogeochemical
Cycles

Radiometry and
Paleoclimate

Terrestrial Systems
and Geophysics

Air-Sea
Interactions

At the Institute of Environmental Physics, applications are invited for a PhD position on

Statistical assessment and modeling of spatio-temporal patterns in speleothem records from the last Glacial to present day

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).



Project Background:

Future climate can only be projected with climate models, in particular General Circulation Models (GCMs). The aim of STACY is to assess climate model capabilities in simulating climate variability. Changes in past climate variability are established through statistical analysis, and combined with improved understanding of paleoclimate archives to derive forward models of the proxy signal formation. These are then applied to assess climate variability changes throughout the last 80,000 years on a global scale.

Position Background

This position will contribute to the project goals by assessing mid-latitude climate changes in space and time with robust statistical techniques. Forward models of speleothem calcite formation will be tested, improved and applied for key sites (in collaboration with project partners). They provide the basis for a climate model- to proxy data comparison focusing on changes in climate variability. The PhD candidate will analyze speleothem datasets, and test, improve, and apply forward models for their oxygen isotope composition, to facilitate the comparison to model simulations.

Requirements:

Applicants should have a MSc degree in physics, mathematics, computer science, geophysics or a closely related field and qualify for the PhD programme in Physics at Heidelberg University. Dedication, quantitative skills and good writing skills in English are important. Experience in programming and data analysis are an advantage, as well as the willingness to visit collaborating research groups and participate in fieldwork. The position is offered for three years (TVöD E-13 50-65%).

Contact:

Please send your application including a cover letter, a CV, an example of your own scientific writing, certificate & transcript of your highest degree earned and the names and contact details of two potential references in one pdf-file to Kira Rehfeld (krehfeld@iup.uni-heidelberg.de, max. 10MB).

Application deadline: September 15th 2018, 1PM CET.

Address enquiries to: Dr. Kira Rehfeld (krehfeld@iup.uni-heidelberg.de).

