UNIVERSITY of COLOGNE INSTITUTE FOR GEOPHYSICS AND METEOROLOGY



The Institute for Geophysics and Meteorology, University of Cologne (IGMK), Germany, invites application for a

PhD Position

Understanding maritime convection using the HALO Microwave Package (HAMP)

(subject to funding approval by the DFG)

The HALO microwave package (HAMP) for airborne cloud and precipitation research is a unique combination of a 26 channel microwave radiometer and a cloud radar. Operated on-board the High Altitude and LOng Range (HALO) Research Aircraft, the first successful measurements were performed in 2013/14 as part of the "Next-generation Aircraft Remote sensing for VALidation studies" (NARVAL). During the upcoming campaigns NARVAL-II (August 2016 in the Caribbean) and North Atlantic Waveguide and Downstream Impact Experiment (NAWDEX, September/October 2016), we will use and expand on the unique remote sensing capabilities of HALO to address the ability of an airborne platform to constrain our understanding of the macroscopic structure of maritime convection in the broader trades. The candidate should participate in both campaigns and subsequently analyze the measurements together with the ones of the earlier campaigns to address the difference of trade wind clouds in the dry and wet seasons with respect to cloud macrophysics and microphysics.

The position (75% TV-L E13) is awarded for at least 3 years. We offer a productive and interdisciplinary working atmosphere including comprehensive supervision and integration into the Graduate School for Geosciences (GSGS; http://www.geosciences.uni-koeln.de/).

Requirements

We expect strong interest in atmospheric science, favorably with a specialization in cloud observations/modeling, radiative transfer, remote sensing, or statistical modeling. Applicants should have a Master of Science equivalent university degree in meteorology, geophysics, physics or mathematics. Experience in scientific programming, preferably in a UNIX/LINUX environment, and knowledge in computational modelling is highly desirable.

Application

Interested candidates should send a complete application package (CV; cover letter describing background, training and research interests; certificates; contact information of two references) as a single PDF to meteo-jobs@uni-koeln.de. Review of applications will begin immediately and continue until the position is filled.

Selection

The selection for the position will be based solely on merit without regard to gender, religion, national origin, political affiliation, marital or family status or other differences. Among equally qualified candidates, handicapped candidates will be given preference.

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