UNIVERSITY OF COLOGNE
INSTITUTE FOR GEOPHYSICS AND METEOROLOGY

The Institute for Geophysics and Meteorology at the University of Cologne (UoC) in Germany invites applications for a

PhD Graduate Research Position in Meteorology (75% TVL13)

This research position is part of the InScAPE research group (http://gop.meteo.uni-koeln.de/inscape/) led by Prof. Roel Neggers. This DFG-funded research project aims to characterize and understand the geometric and spatial structure of cumulus cloud populations in high, unprecedented detail using a new stereo camera network at our JOYCE site in Jülich (http://joyce.cloud), in combination with high-resolution cloud-resolving simulations with the ICON-LEM model. We are looking for a model enthusiast to conduct the simulations on a supercomputer and to cross-compare the model results with stereo camera data and satellite data. Subsequently this information will be used to improve the representation of cumulus clouds in weather and climate models. The work will be conducted in collaboration with scientists at the Meteorological Institute of the University of Bonn.

The University of Cologne is situated in an attractive region in Germany due to a vivid cultural and international scene, as well as the proximity to various natural parks. With approximately 50,000 students, the University of Cologne is one of the largest universities in Germany and ranks among the Excellence Universities. It employs over 600 professors and 7,000 academic and non-academic staff.

Applicants should have a master's degree in meteorology or in another related field of the natural sciences (geophysics, physics, mathematics). Experience in the following areas is highly recommended:

- Geophysical fluid dynamical modeling, in particular Large-Eddy Simulation (LES)
- Comparing high-resolution model output with meteorological measurements
- Supercomputing
- Scientific programming (F90, C, Python, shell scripting)
- UNIX/LINUX operating systems

We expect a good command of written and oral English, the willingness to present research results at scientific conferences, and the ability to collaborate with others.

We offer you

- A diverse and fair working environment
- Support in reconciling work and family life
- Flexible working time models, full-time positions suitable for job sharing
- Extensive advanced training opportunities
- Occupational health management offers
- Local transport ticket at a discount for UoC employees

The position is awarded for maximally three years, including a 6-month probationary period. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on

remuneration group TVL-13 (75%) of the pay scale for the German public sector. The University of Cologne promotes equal opportunities and diversity in its employment relations. Women are expressly encouraged to apply and given priority in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We expressly welcome applications from individuals with severe disabilities or people of equivalent status. Severely disabled applicants of equal merit and qualifications will be given priority.

Interested candidates should send a complete application package (CV; motivation letter describing background, training and research interests matching the position; degree certificates; and contact information of two references) as a single PDF to Roel Neggers (neggers@meteo.uni-koeln.de) until **15 November 2019**. The position will be available until filled.