



## Postdoc in Arctic boundary-layer meteorology (f/m/x)

### CRC TR172 | Institute for Geophysics and Meteorology

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

The position is funded within the Transregional Collaborative Research Center TR172 on "Arctic Amplification: Climate relevant Atmospheric and Surface processes, and feedback mechanisms (AC)<sup>3</sup>" (<https://www.ac3-tr.de>) and will focus on boundary-layer processes.

#### YOUR TASKS

- » Analyze the impact of heterogeneous sea-ice cover on atmospheric boundary layer fluxes
- » Derive dimensionless heterogeneity parameters that can effectively represent the competing effects of sea-ice patterns and meteorological forcing
- » Perform numerical simulations (Large Eddy Simulations) with heterogeneous sea-ice cover
- » Test and identify scalings for the effective representation of surface-atmosphere fluxes above heterogeneous sea-ice cover
- » Active participation in the (AC)<sup>3</sup> consortium and in research communication.

#### YOUR PROFILE

- » PhD in Meteorology, Atmospheric Sciences, or a related field
- » Strong experience in atmospheric modeling or atmospheric data analysis, in particular within boundary-layer meteorology
- » Advanced scientific programming knowledge (python, Fortran, HPC)
- » Ability to work with atmospheric model outputs
- » Very good communication skills in written and spoken english
- » Experience with Large Eddy Simulations is advantageous but not mandatory

#### WE OFFER

- » Being part of a large community effort to better understand drastic climate change in the Arctic
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Flexible working time models
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Opportunity to work remotely

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is soon as possible on a full-time basis (39,83 hours per week). The position is to be filled for a fixed term until 31 December 2027. If the applicant meets the relevant wage requirements and personal qualifications, the salary will be based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications without a photo under: <https://jobportal.uni-koeln.de>. The reference number is Wiss2501-18. The application deadline is 24 February 2025. For further inquiries, please contact Professor Dr Nikki Vercauteren ([nikki.vercauteren@uni-koeln.de](mailto:nikki.vercauteren@uni-koeln.de)) and take a look at our [FAQs](#).