



## Postdoctoral position (f/m/x) on turbulence in kilometre-scale climate models

### Institute of Geophysics and Meteorology (IGMK)

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 part of the WarmWorld consortium (<https://warmworld.de>), which aims to develop innovative approaches for km-scale climate modelling. It will focus on the representation of turbulent mixing in km-scale climate models.

#### YOUR TASKS

- » Development of a new stochastic parameterization approach for turbulent mixing derived from a systematic data-driven approach
- » Processing data from the Arctic field observations, including the MOSAiC Arctic expedition
- » Processing data from turbulence-resolving numerical simulations
- » Benchmarking the stochastic parameterization with standard turbulence theory
- » Active participation in research communication

#### YOUR PROFILE

- » Doctoral degree in Meteorology, Atmospheric Sciences, Applied Mathematics or a related field
- » Strong experience in atmospheric modelling or atmospheric data analysis
- » Knowledge in data-driven modeling, machine learning or data assimilation
- » Advanced scientific programming knowledge (Python, Fortran, HPC)
- » Ability to work with the outputs of atmospheric models
- » Very good communication skills in written and spoken English

#### WE OFFER

- » Being part of a large joint project to develop km-scale climate models
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Flexible working time models
- » 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 available immediately on a full-time basis (39,83 hours per week). The position is to be filled for a fixed term until 30.04.2027. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group I3 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 Wiss2408-05. The application deadline is 25.08.2024.

For further inquiries, please contact Professor Dr Nikki Vercauteren ([nikki.vercauteren@uni-koeln.de](mailto:nikki.vercauteren@uni-koeln.de)).