



PhD position on cloud and radiation modelling (f/m/x)

Institute of 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.

This position is part of the DFG Research Unit C3SAR (Cloud 3D Structure And Radiation) – a joint project with partners in Leipzig, Munich and Hannover as well as the Deutscher Wetterdienst. The partners combine leading expertise in modelling and observing clouds and their radiative properties, with the aim of integrating the complex spatial structures of clouds into climate models and global remote sensing.

YOUR TASKS

- » Contribute to the project aim of improving the representation of complex cloud structures in global climate models
- » Deploy the state-of-the-art ICON model at hectometer resolution
- » Participate in a dedicated field campaign and contribute with specific simulations
- » Refine the simulation setup with a focus on cloud structures and regional requirements
- » Explore the possibility of 3D reconstruction algorithms within the virtual world of model simulations
- » Investigate the sensitivity of cloud structure representation on various macrophysical parameters

YOUR PROFILE

- » Master's degree in Meteorology, Physics, Mathematics, Computer Science or a related field
- » Highly motivated person with strong interest in mathematical modelling and analysis of cloud structures
- » Experience in programming and Linux / Unix operating systems
- » High willingness to collaborate with scientists in- and outside of the Research Unit and to establish new scientific collaborations
- » Ability to work in a team as well as independently
- » Very good communication skills in written and spoken English

WE OFFER

- » Working in an inspiring institute and Research Unit
- » 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 part-time basis (29,87 hours per week). It is limited for 3 years. 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 Wiss2408-03. The application deadline is 07.09.2024. For further inquiries, please contact Dr Vera Schemann (vera.schemann@uni-koeln.de).