

The Institute for Atmospheric Physics at  
Johannes Gutenberg University Mainz invites applications for a

## PhD position (m/f/d)

funded within the Transregional Collaborative Research Centre 301

TPChange – The Tropopause Region in a Changing Atmosphere

by the German Research Foundation (DFG, Deutsche Forschungsgemeinschaft).

Within TPChange we aim to improve the understanding of relevant multiscale processes in the tropopause region and to specify their impact on composition, dynamics and ultimately on future climate and climate variability. The PhD candidate will work in project C05

## Transport processes regulating the lowermost stratospheric ozone reservoir

Ozone in the lowermost stratosphere (LMS) is important for radiative forcing and contributes to the near-surface ozone abundance where it affects air quality. The transport processes shaping the ozone distribution in the LMS cover a broad range of scales, complicating a detailed understanding and characterization of their relative contributions.

To make progress on this issue, we will combine measurement data from aircraft and meteorological soundings with modern reanalysis data to characterize and quantify the transport processes that control ozone in the LMS. Our goal is to derive an improved mass budget to quantify regional and seasonal dependencies of the ozone abundance in the LMS. The successful candidate will work in close collaboration with our project partner at LMU (Co-PI Prof. Birner and the PhD student there) to put the measurement-based results into a global perspective.

### Requirements

The candidate holds a MSc in atmospheric sciences or related field. Ideally the candidate has experience with computational analysis of large experimental data and/or computational analysis in general.

### Employment conditions

The position is offered for 4 years and the place of employment will be Mainz. The targeted starting date is as soon as possible.

### Applications and deadline

Please send applications with reference to the code **C05-PHD1-JGU** as one pdf-document to [tpc\\_jobs@uni-mainz.de](mailto:tpc_jobs@uni-mainz.de), including a motivation letter, CV, copies of relevant certificates, preferred starting date, and the names of at minimum two references.

Review of all applications will start on **1 October 2021** and will continue until the position is filled.

For further information, please contact Prof. Dr. Peter Hoor.

TPChange offers a comprehensive and structured training for early career researchers. In addition to self-organised activities such as workshops, trainings and a guest program, the successful candidate will have the opportunity, if desired, to pursue international research visits. The consortium conducts an ambitious program to gradually enhance gender equality on all career levels.

JGU actively supports equality, diversity and inclusion, and as an equal opportunity employer, JGU explicitly encourages applications from women as well as from all others who will bring additional diversity to the university's research and teaching. Applicants with disabilities will be preferentially considered if suitably qualified.

We look forward to your application!

### Notes on Data Protection

<https://www.verwaltung.personal.uni-mainz.de/files/2020/09/Datenschutz-BewerberInnen.pdf>