



ENERGY TRANSFERS IN
ATMOSPHERE AND OCEAN



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The Applied Analysis group at Jacobs University, Bremen, invites applications for

Doctoral Position in Applied Mathematics (f/m)

Job ID JU-16-47

(75% time / limited for 3.5 years)

The position is funded via the Germany Science Foundation Collaborative Research Center "Energy Transfers in Atmosphere and Ocean" for a duration of 3.5 years. The successful applicant will work within the project "Systematic multi-scale analysis and modelling of geophysical flows" specifically to extend variational balance models to a broader range of physical regimes and geophysical flow equations together with Principal Investigators Prof. Marcel Oliver (Jacobs University), Dr. Christian Franzke (Universität Hamburg), and Prof. Jens Rademacher (Universität Bremen). Active participation in the general network activities of the Collaborative Research Center is expected. The successful applicant will have the option to become a member of the Bremen International Graduate School for Marine Sciences (GLOMAR) and complete a PhD degree at Jacobs University.

Applicants are expected to have a Master degree in mathematics or a related field with a good background or outstanding research promise in applied analysis, theoretical fluid dynamics, and/or geophysical fluid dynamics.

The starting date is negotiable with a desired starting date no later than January 1, 2017. Employment is 75% time at the level of Research Associate at a salary equivalent to public payscale.

Applications should arrive by December 7, 2016, or until the position is filled. Applicants should submit a cover letter, curriculum vitae, list of publications, a statement of research interests, and the names and addresses of at least three potential referees as a single PDF attachment to trrjobs@jacobs-university.de.

TRR 181 is a collaborative project between Universität Hamburg and Universität Bremen funded by Deutsche Forschungsgemeinschaft for initially four years with possible extension for eight years. Further participating institutions are Alfred-Wegener-Institut Bremerhaven, Jacobs University Bremen, Max-Planck-Institut für Meteorologie Hamburg, Helmholtz-Zentrum Geesthacht, Leibniz-Institut für Ostseeforschung Warnemünde, and Leibniz-Institut für Atmosphärenphysik, Kühlungsborn.

Physical oceanographers, meteorologists, and applied mathematicians are working together in the project

- I. to understand the energy transfers between the different dynamical regimes – small-scale turbulence, internal gravity waves, and geostrophically balanced motion – in both atmosphere and ocean,
- II. to develop, to test, and to implement new and consistent parameterisations in models, and

III. develop mathematical and numerical methods featuring consistent energetics.

The Collaborative Research Center TRR 181 aims to increase the number of women in research and teaching in this field and explicitly encourages women to apply.

For further information about TRR 181, please see <http://www.trr-energytransfers.de/>

Jacobs University is an equal opportunity employer.

For further information about the Mathematical Sciences at Jacobs University please see <http://math.jacobs-university.de/>