Universität Hamburg invites applications for a Research Associate for the project "PalMod" in accordance with § 28 (3) of Hamburg's Higher Education Act (HmbHG*). The position commences on October 1, 2015 (earliest).

It is remunerated at the salary level TV-L 13 and calls for 39 hours per week.

The short-term nature of this contract is based upon § 2 of the Academic Short-Term Labor Contract Act (WissZeitVG). The term is fixed to 48 months.

The University aims to increase the number of women in research and teaching and explicitly encourages women to apply. Equally qualified female applicants will receive preference in accordance with Hamburg’s Higher Education Act (HmbHG).

Tasks:
Duties include academic services in the project named above. Research associates can also pursue independent research and further academic qualifications.

Area(s) of Responsibility:
The successful candidate will develop and implement a computational component in an earth system model for highly accurate and efficient multi-tracer transport. This component will be based on conservative semi-Lagrangian transport schemes and will be verified and validated to be used for long-term climate simulations. Parallel execution of the code within a computational framework for earth system modeling will be an important task.

Requirements:
A university degree in a relevant subject plus doctorate. In particular we prefer an excellent graduate degree (PhD) in Mathematics, Physics, Meteorology, Oceanography or related subjects, with a strong background in
- Numerical analysis for geophysical fluid dynamics or wave propagation applications
- Galerkin or finite volume methods
- Transport processes and Lagrangian Methods
- Adaptive mesh refinement
- High performance computing

Additionally the following skills will be evaluated:
- Profound interest in the mathematical structure of geophysical equation sets
- Demonstrated experience in applying differential Galerkin or finite volume type methods to geoscientific applications
- Demonstrated knowledge and skills in tracer transport (or related) processes, adaptive mesh refinement, numerical analysis, and Lagrangian methods.

* Hamburg Higher Education Act
• Proficiency in working with, and developing applications for geoscientific problems involving multiple scales.
• Interest and experience in working with high performance computing architectures.
• Ability to conduct independent work and to coordinate a project.
• Strong oral and written English communication skills.
• Demonstrated Programming in a higher programming language (C/C++, Fortran, etc.)

Severely disabled applicants will receive preference over equally qualified non-disabled applicants.

For further information, please contact Prof. Dr. Jörn Behrens (joern.behrens@uni-hamburg.de) or consult our website at http://www.clisap.de/numerical-methods.

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is Sept. 18, 2015. Please send applications to: Bewerbungen@math.uni-hamburg.de.