# Faculty: School of Mathematics, Informatics and Natural Sciences Department: Department of Geosciences Seminar/Institute: Institute of Oceanography

Pending funding, Universität Hamburg invites applications for a

### Post-doc Research Associate commencing on 01-03-2014.

The position is full-time (39 hours per week) and is remunerated at the 13 TV-L salary level.

This short-term contract terminates on **28-02-2015**. The short-term nature of this contract is based upon § 2 of the Academic Short-term Contract Act (WissZeitVG).

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 relevant department or institute. Research associates can also pursue independent research and further academic qualifications as well as acquire teaching experience. These duties are intended to promote academic achievement. Therefore, at least one-third of set working hours will be made available for the associate's own academic work.\*

# Area(s) of responsibility:

Associates will be required to conduct research on using the semi-geostrophic approximation to study the submesoscale dynamics in the ocean.

Research projects will involve: the study of geostrophic turbulence at scales smaller than the Rossby radius of deformation making use of the semi-geostrophic approximation which gives rise to frontogenic solutions.

The projects will involve to find analytical solutions to the problems as well as the development of idealized numerical models.

#### **Requirements:**

Doctoral degree in one of the following academic subjects is required: mathematics, physics, theoretical meteorology or theoretical oceanography. Although non essential, due to the nonmodal structure of the semi-geostrophic instabilities, knowledge in non-equilibrium thermodynamics and stochastic dynamics will be positively evaluated. Knowledge in computer language FORTRAN or similar languages is required. Strong knowledge in geophysical fluid dynamics and in analytic techniques is also required.

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

Applications should include a letter of application, curriculum vitae, and copies of degree certificate(s). The deadline for applications is: **15.01.2014**. Please send applications via email to: gualtiero.badin@zmaw.de

For further information, please contact Prof. Dr. Gualtiero Badin on +49-40-42838-5656 or gualtiero.badin@zmaw.de. Alternatively, please consult our website http://www.ifm.zmaw.de

\*In accordance with § 28 (2) sentence 3 of Hamburg's Higher Education Act.