

Faculty/Department: Mathematics, Informatics, Natural Sciences
Seminar/Institute: Institut für Meereskunde

Pending approval of external funding Universität Hamburg invites applications for a Research Associate for the project **“Sea ice dispersion using Lagrangian dynamics: a dynamical systems study”** in accordance with Section 28 subsection 3 of the Hamburg Higher Education Act (Hamburgisches Hochschulgesetz, HmbHG). The position commences on 15/04/2017 or later.

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

The fixed-term nature of this contract is based upon Section 2 of the Academic Fixed-Term Labor Contract Act (Wissenschaftszeitvertragsgesetz, WissZeitVG). The term is fixed for a period of 12 months and it is financed by the DFG research grant BA 5068/8-1.

The University aims to increase the number of women in research and teaching and explicitly encourages qualified women to apply. Equally qualified female applicants will receive preference in accordance with the Hamburg Equality Act (Hamburgisches Gleichstellungsgesetz, HmbGleG).

Responsibilities:

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

Specific Duties:

The applicant will work on the analysis of the chaotic dispersion of sea-ice. The analysis will be done using existing data sets of buoys attached to sea-ice. The dispersion of the buoys will allow to characterize the Finite Separation Lyapunov Exponents (FSLEs) and thus characterize the form of dispersion at different scales.

The applicant will have to present the results of the work in international journals and conferences.

The applicant will be part of the group lead by Prof. Dr. Badin.

Requirements:

A university degree in a relevant subject plus doctorate. In particular, a degree and/or PhD in physics, mathematics, applied mathematics will be preferential. The applicant should demonstrate profound interest on the research field of chaotic dynamical systems applied to the climate system. Hence, knowledge on nonlinear dynamical systems will be positively evaluated. Additional knowledge in climate/atmosphere and ocean dynamics, and in particular geophysical fluid dynamics, will be positively evaluated. Knowledge in scientific computing languages (unix, fortran, C, C++) and/or scientific software (matlab, python, mathematica) will be essential. Experience in data analysis will be positively evaluated.

Additionally, we are looking for applicants with:

- experience in research, writing and publication of scientific articles, working in different institutes and countries
- ability to conduct independent work, but at the same time to fit into the research group
- strong knowledge of the English language

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

For further information, please contact Prof. Dr. Gualtiero Badin, gualtiero.badin@uni-hamburg.de, +49 40 42838 5656 or consult our website at <https://www.ifm.uni-hamburg.de/en/institute/staff/badin.html>.

Applications should include a cover letter, curriculum vitae, and copies of degree certificate(s). The application deadline is 15 March 2017 . Please send applications to: gualtiero.badin@uni-hamburg.de . Only complete applications will be considered.