

## **Job posting** (Phy 06/2024)

The Leibniz Institute for Baltic Sea Research Warnemünde (IOW) has a temporary vacancy to be filled as soon as possible

### **PhD position in the Department of Physical Oceanography**

for a period of 3 years and a percentage of 75% (30h/week).

Remuneration is paid in accordance with the Tarifvertrag für den öffentlichen Dienst der Länder (TV-L, Public Sector Collective Agreement for Federal States ) salary scale at level 13.

Female applicants and applicants with disability are given preference in the case of equal qualifications and suitability.

#### **Who are we?**

The IOW is an independent research institute of the Leibniz Association for which equal opportunities, family friendliness and work-life balance are very important. Our research focus is on the coastal and marginal seas, especially the Baltic Sea. The staff of the four sections Physical Oceanography and Instrumentation, Marine Chemistry, Biological Oceanography and Marine Geology works interdisciplinary within a joint research programme.

#### **What will be your tasks?**

The PhD position is offered within the Collaborative Research Center TRR 181 “Energy Transfers in Atmosphere and Ocean” funded by the German Research Foundation. TRR 181 is an interdisciplinary project between several research locations in Germany, including IOW, bringing together physical oceanographers, meteorologists, and applied mathematicians with the goal to develop energetically consistent parameterizations to improve climate models. Further details on the ongoing research within TRR181 can be found on the website at [www.trr-energytransfers.de](http://www.trr-energytransfers.de).

The doctoral thesis will make a scientific contribution to the TRR181 subproject L2 “Quantifying Dynamical Regimes in the Ocean and the Atmosphere”, specifically to the work package on “Quantifying internal wave emission in realistic ocean models”. The main task is to understand and quantify energy transfers between eddies and internal gravity waves in realistic ocean models of increasing complexity and for different dynamical regimes using flow decomposition. The

project involves the numerical implementation of nonlinear flow decomposition to realistic ocean scenarios and diagnosing wave emission from eddies in high-resolution realistic ocean model. You will accomplish these tasks using theory and numerical modeling and publish the results in scientific journals and present them in scientific conferences.

### **What do we expect from you?**

A Master degree (at least grade “good” or above) in Physical Oceanography, Physics, Mathematics, Meteorology, or a related field, an interest in ocean dynamics and a strong background in theory and/or mathematics. Strong programming skills are required and knowledge of coding languages such as Python is desirable. Experience with ocean modelling and numerical data analysis is preferable. Good knowledge of English as a working language is expected. Good presentation, writing, and scientific communication skills, and the ability to work in a team are an advantage.

### **What does the IOW offer?**

The IOW offers you a varied workplace in the immediate vicinity of the Baltic Sea ([Work at sea](#)) with flexible working arrangements, e.g. the possibility of working from home or remotely. A very good infrastructure with modern laboratory and office equipment, including on our own research vessel, form the framework for the best working conditions.

In addition, within the DFG project TRR181, workshops and spring schools with a structured training for early career researchers, as well as annual retreats and prospect of an international research visit during the PhD are offered.

### **How do we promote equal opportunities ?**

Our job offers are aimed at all people regardless of their gender. Research benefits from a diverse working environment, which is why we have signed the Diversity Charter.

IOW aims to specifically promote women in areas where they are underrepresented. For this purpose, the institute has given itself a plan to promote equality ([plan for the equal opportunities committee at the IOW](#)) and has repeatedly been awarded the Total E-Quality award for its commitment ([website TOTAL E-QUALITY e. V.](#)). You can find an overview of our measures for equal opportunities and for improving the compatibility of work and family on our [website](#).

### How to apply?

Please send us your application documents as one PDF file including cover letter, CV, copies of your certificates, description of relevant activities and experiences, as well as two references (names, affiliations, email-addresses).

If applicable, please mention the disability in your letter of application and enclose a copy of the relevant certificate. Applications received after the deadline will be considered until the position is filled.

We look forward to receiving your application, quoting the keyword: **Phy 06/2024** until **14.08.2024**

to:

[bewerbung.physik@io-warnemuende.de](mailto:bewerbung.physik@io-warnemuende.de)

or

Leibniz Institute for Baltic Sea Research Warnemünde  
Human Resources Department  
Seestraße 15  
18119 Rostock  
Germany

The interviews are expected to take place on **27.08.2024**

Unfortunately, we cannot cover your application and travel costs.

For further information, please contact:

Dr. Manita Chouksey ([manita.chouksey@io-warnemuende.de](mailto:manita.chouksey@io-warnemuende.de))