

HIFMB

Helmholtz-Institut
für Funktionelle
Marine Biodiversität
OLDENBURG



The Helmholtz-Institute for Functional Marine Biodiversity (HIFMB) is a new institute integrating marine biodiversity research, established on the campus of the Carl von Ossietzky University Oldenburg. It joins the scientific profiles of the Institute of Chemistry and Biology of Marine Systems (ICBM) Oldenburg and the Alfred Wegener Institute – Helmholtz Centre for Polar and Marine Research Bremerhaven (AWI).

During the establishment phase, we are able to offer a position as a

Postdoc

Optimal Control Theory for spatial planning

Background and tasks:

The candidate will develop a novel theoretic framework for spatial planning in marine and coastal areas. Using recent advances in the extension of optimal control theory to spatial distributed systems, the candidate will i) transfer such approaches (e.g. the Pontryagin's Maximum Principle) to complex networks and ii) explore its suitability for spatial planning. The goal will be to apply this framework for determining the optimal spatial structure for a given conservation management objective, e.g. the protection of a particular species with known dynamics in time (population dynamics) and space (migration, recruitment) and the relevant trade-offs in management. The suitability of this approach shall be tested with real world examples.

Requirements:

Formal requirement for application is an outstanding academic university degree (PhD, promotion) in Marine Environmental Science, Ecology or a related subject. We require a firm background in mathematical modelling or theoretical physics. The candidate should be ready to work and communicate in an international research environment.

If you are interested or if you have any further questions, please contact: **Bernd Blasius**, bernd.blasius@uni-oldenburg.de.

The position is limited to three years. The salary will be paid in accordance with the German Tarifvertrag des öffentlichen Dienstes (TVöD Bund) based on qualifications and transferred tasks up to salary group 13. The place of employment will be **Oldenburg**.

We offer you a multi-disciplinary, international, and fascinating professional environment with flexible working hours, state-of-the-art research equipment, and a first-rate infrastructure. The University of Oldenburg and AWI aim to increase the number of women in the scientific staff and therefore encourages women to apply. Disabled applicants will be given preference when equal qualifications are present. The AWI fosters the compatibility of work and family

through various means. Because of our engagement in the area of work-life compatibility we have been awarded the certificate "Career and Family".

Please forward your applications with the standard documentation (letter of motivation, CV, certificates and a list of publications) by **April 30th, 2017** referencing code **43/D/HIFMB** to: Alfred-Wegener-Institut für Polar- und Meeresforschung, Personalabteilung (human resources), Postfach 12 01 61, 27515 Bremerhaven/Germany or by e-mail (all documents merged into one PDF file) to: personal@awi.de.