The German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig is a National Research Centre funded by the German Research Foundation (DFG). Its central mission is to promote theory-driven synthesis and data-driven theory in this emerging field. The iDiv concept encompasses recording biodiversity, understanding its emergence, exploring its consequences for ecosystem functions and services, and developing strategies to safeguard biodiversity under global change. Located in Leipzig, it is a central institution of Leipzig University and jointly hosted by the Martin Luther University Halle-Wittenberg, the Friedrich Schiller University Jena and the Helmholtz Centre for Environmental Research (UFZ). It receives further support from the Max Planck Society, the Leibniz Association and the Free State of Saxony. More information about iDiv: www.idiv.de.

The Biodiversity Economics research group aims at improving the scientific basis for sustainability in human-nature relationships, studying the sustainable use of renewable natural resources (e.g. marine fisheries, rangelands, forests) and conservation of biodiversity from regional to global. We study how economic incentives shape behaviour towards nature, what sustainability – understood as justice in human-nature relationships – means, and how economic policy instruments could contribute to that end. Our methodological expertise comprises quantitative ecological-economic modelling, dynamic optimization, statistics, economic experiments, conceptual modelling, game theory and capital theory. Our research group is internationally well connected. We engage in integrative interdisciplinary research with natural and social scientists and researchers from the humanities. Former doctoral researchers of Martin Quaas’s group now hold professorships at leading universities in North America and Europe, and work for governments or in the private sector.

At the earliest possible opportunity, Leipzig University seeks to fill the following position in Leipzig:

**Postdoctoral Researcher**

“SOMBEE: Scenarios of Marine Biodiversity and Evolution under Exploitation and Climate Change”

(Fixed term of three years, 100% of a full-time position)

Salary: Entgeltgruppe 13 TV-L

**Background:**

A consortium of ten research groups from France, Germany, Canada, China, Peru, Spain, Turkey, and the UK studies Scenarios of Marine Biodiversity and Evolution under Exploitation and Climate Change within the Belmont-funded project SOMBEE. This project is an interdisciplinary collaboration between biologists, economists and computer scientists, and a transdisciplinary collaboration with stakeholders in the North Sea, Western Canada, Northern Humboldt, the Yellow Sea, Black Sea and the Gulf of Lions. SOMBEE has the objectives of: developing a cutting-edge evolutionary ecosystem model with a primary focus on fish; applying it to the set of six contrasting ecosystems to better understand the selective pressures exerted by fishing and climate change; projecting future changes in intra- and inter-specific biodiversity, related fishing production, and economic profit under combined climate and fishing scenarios; and quantifying the synergistic and antagonistic ecological, evolutionary and economic impacts of these drivers. SOMBEE will advance knowledge on the capacity of fish communities to adapt to global change and our ability to forecast their persistence and the future sustainability of fisheries and food production. The sub-project at iDiv leads the work package on future economic and management pathways for fisheries. To this end, we will develop an economic sub-model for the Evo-OSMOSE-Econ model in SOMBEE. The model will be used to study the economic consequences of fisheries- and climate-induced evolution of life history traits for fishermen and consumers of fish, and to explore how fisheries management strategies should optimally deal with the eco-evolutionary dynamics.

**Job description:**

- contribution to the development of a model that combines ecological, evolutionary and economic dynamics of harvested marine ecosystems, within the international collaborative project SOMBEE
- deriving results on economic consequences of fisheries- and climate-induced evolution of life history traits for economic outcomes of marine fisheries
- optimizing fisheries management strategies subject to eco-evolutionary dynamics of harvested populations
- presentation and discussion of methods and results with international project partners
- presentation and discussion of methods and results with practitioners and stakeholders
• writing and publication of scientific papers in peer-reviewed journals
• presentation of results at national and international conferences
• elaborating on possibilities of integrative collaboration with further research groups at iDiv.

Requirements:
• excellent PhD in resource economics or a related field of research
• expertise in environmental and resource economics/ecological economics
• profound knowledge of resource economic theory and modelling
• quantitative skills (modelling, statistics, econometrics)
• capacity for interdisciplinary collaboration with marine biologists and computer scientists
• excellent English communication skills (spoken and written)
• innovative, able to work on one’s own initiative
• team player and strong organizational skills.

Applications will be accepted until 15 March 2019.

Applications should include:
• cover letter (in English or German) describing motivation for the project, research interests and relevant experience
• complete curriculum vitae including names and contact details of at least two scientific references
• digital copy of PhD certificate
• PDFs of up to three publications.

Applications quoting the reference file number 41/2019 will be accepted via our application portal at apply.idiv.de. While we prefer applications via this portal, hard-copy applications may also be sent to

German Centre for Integrative Biodiversity Research – iDiv
Professor Martin Quaas
Deutscher Platz 5e, 04103 Leipzig

Queries concerning the application process should be directed to our HR Department (hr@idiv.de); for research project questions, please contact Professor Martin Quaas (martin.quaas@idiv.de).

Please note that applying via email is not entirely secure under data protection law. The sender assumes full responsibility.

Severely disabled persons are encouraged to apply and will be given preference in the case of equal suitability.

Data protection

Your personal data which is included in your application documents or obtained during the interview shall be processed exclusively for the purposes of the selection process for the advertised position. The legal basis for such data processing is Section 11(1) of the Saxon Data Protection Implementation Act (Sächsisches Datenschutzdurchführungsgesetz) in conjunction with the EU General Data Protection Regulation (GDPR). The person responsible for the application process is the addressee of the application provided in this advertisement. As part of the application process, your personal data will be passed on to the following persons or departments within Leipzig University:

• members of the selection committee, the HR office
• the Commissioner for Equal Opportunities
• the Disabled Persons’ Representatives and
• if necessary, the Staff Council

as part of their organisational or statutory responsibilities.

Your personal data will be erased no later than six months after completion of the selection process. In accordance with the GDPR, subject to the relevant statutory requirements you have the following rights vis-à-vis the addressee of the application: right of access (Art. 15 GDPR), right of rectification of incorrect personal data (Art. 16 GDPR); right of erasure (Art. 17 GDPR), right of restriction of processing (Art. 18 GDPR) and right of objection to processing (Art. 21 GDPR). If you have any questions, please contact the data protection officer at Leipzig University: Mr Thomas Braatz, Augustusplatz 10, 04109 Leipzig. You also have the right to lodge a complaint with the Saxon Commissioner for Data Protection.