

**Reference file number
41/2019**

Leipzig, 5 February 2019

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 concept of iDiv encompasses the detection of biodiversity, understanding its emergence, exploring its consequences for ecosystem functions and services, and developing strategies to safeguard biodiversity under global change. It is located in the city of Leipzig and it's a central institution of the Leipzig University, jointly hosted by the Martin-Luther-University Halle-Wittenberg, the Friedrich Schiller University Jena and the Helmholtz Centre for Environmental Research (UFZ). Furthermore, it gains support by 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 behavior towards nature, what sustainability – understood as justice in human-nature relationships – means, and how economic policy instruments could contribute to that end. Our methodical expertise comprises quantitative ecological-economic modeling, dynamic optimization, statistics, economic experiments, conceptual modeling, 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' group have now professorships at leading universities in North America and Europe; work for the government, or in the private sector.

Leipzig University offers the following position in Leipzig as soon as possible:

Postdoctoral Researcher

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

(limited for three years, 100 % of a full-time employment)

Salary: Entgeltgruppe 13 TV-L

Background:

A consortium of ten research groups from France, Germany, Canada, China, Peru, Spain, Turkey, and 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, further a transdisciplinary collaboration with stakeholders in North Sea, West Coast Canada, Northern Humboldt, Yellow Sea, Black Sea and Gulf of Loins. SOMBEE has the objectives to develop a cutting edge evolutionary ecosystem model with primary focus on fish; apply it to the set of six contrasting ecosystems to better understand the selective pressures exerted by fishing and climate change; project future changes in intra- and inter-specific biodiversity, related fishing production and economic profit under combined climate and fishing scenarios and quantify 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 fisheries economic and management pathways. 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 publishing 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)
- ability of interdisciplinary collaboration with marine biologists and computer scientists
- excellent English communication skills (speaking and writing)
- innovative, able to work on his or her own initiative
- team-oriented and strong organizational skills

Applications are accepted until **28 February 2019**.

Applications should include:

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

Applications with reference file number **41/2019** are accepted via our application portal under apply.idiv.de. We prefer applications via our application portal, hard copy applications can be sent to

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

For queries on the application process, please contact our HR Department (hr@idiv.de); for research project questions, contact Professor Dr. Martin Quaas (martin.quaas@idiv.de).

Applying via email is questionable 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 data processing is Article 11 Paragraph 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 below 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 Representative Body for Severely Disabled Employees and
- if necessary, the Staff Council

as part of their organisational or statutory responsibilities.

Your personal data will be deleted at the latest six months following completion of the selection process. In accordance with the GDPR you have the following rights vis-à-vis the addressee of the application if the relevant statutory requirements exist: right of access (Art. 15 of the GDPR), right of rectification of incorrect personal data (Art. 16 of the GDPR); data deletion (Art. 17 of the GDPR), restriction of processing (Art. 18 of the GDPR) and objection to processing (Art. 21 of the 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 data protection commissioner.