



Reference number 33/2020

## DOCTORAL RESEARCHER (M/F/D) IN “RESOURCE ECONOMICS”

Limited for 3 years of DFG funding

75% of a full-time position

Salary: *Entgeltgruppe 13 TV-L*

Leipzig University seeks to fill the above position at the German Centre for Integrative Biodiversity Research (iDiv), Biodiversity Economics group, in Leipzig from 1 April 2020.

**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. 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 is also supported by the Max Planck Society, the Leibniz Association and the Free State of Saxony. More information about iDiv: [www.idiv.de](http://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 this end. Our methodological expertise comprises quantitative ecological-economic modelling, dynamic optimisation, 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 the group now have professorships at leading universities in North America and Europe, work for the government, or in the private sector.

### Background

Renewable natural resources are of vital importance for the future of human well-being, but they are under constant threat of overuse. Especially for mobile common pool resources, resource users have strategic incentives to extract more than the socially efficient amount. Two prominent and still unresolved cases in Europe are overfishing and overuse of groundwater resources. New, scientifically sound policy approaches are needed, as these resources face changing and increasing risks: On the one hand, climate change will alter volatility in the regeneration of the resource as well as potential tipping points in its dynamics of movement. On the other hand, patterns of resource use shape risks and thus lead to ‘endogenous risks’. To tackle these challenges, an international team of resource economists from France (Center for Environmental Economics Montpellier, Aix-Marseille School of Economics) and Germany (iDiv, Leipzig University) is starting the new collaborative project CRaMoRes, *Changing risks and mobile common pool resources: Economic analysis of resource-user behavior and policy instruments for sustainability*, funded by the ANR and DFG under their French-German funding programme for the humanities and social sciences. The doctoral research will thus take place as part of a vibrant international research group with regular meetings both in Leipzig and Montpellier: it will be jointly supervised by M. Quaas (iDiv) and N. Quérout (CEE-M), with the option of awarding a joint PhD from Leipzig University and the University of Montpellier.

### Job description

- Contributing to the development of a resource-economic model that describes individual resource-users’ behaviour under risk, including risk aversion and state-dependent risk preferences, and builds on dynamic game theory to study how changes in climate forcing and endogenous risks affect the strategic incentives for resource (over-)use of mobile common pool resources
- Applying the model to the case of European fisheries and aquifers
- Writing and publishing scientific papers in peer-reviewed journals
- Presentation of results at national and international conferences
- Presentation and discussion of methods and results with national and international project partners
- Doctoral studies within the Central-German Doctoral Program Economics, regular participation and contributions to the doctoral seminar of the Faculty of Economics and Management Science of Leipzig University

- Regular research visits to the Center for Environmental Economics Montpellier

### **Requirements**

- Excellent master's degree or equivalent in economics or a related field of research
- Strong and documented interest in resource economics
- Quantitative skills (statistics, econometrics, modelling)
- Knowledge of theoretical economic approaches
- Excellent English communication skills (spoken and written)
- Innovative and able to work on your own initiative
- Team player and strong organisational skills

Please send your application, quoting the reference number 33/2020, via our application portal at <https://apply.idiv.de>. Applications close on **26 February 2020**. While we prefer applications via this portal, hard-copy applications may also be sent to:

**German Centre for Integrative Biodiversity Research – iDiv (Halle-Jena-Leipzig)**  
**Professor Martin Quaas**  
**Deutscher Platz 5e**  
**04103 Leipzig.**

### **Applications should include:**

- Cover letter in English describing the applicant's 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 the applicant's master's certificate
- PDF of one thesis chapter

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

Severely disabled persons are encouraged to apply and will be given preference in the case of equal suitability. Please note that applying via email is not entirely secure under data protection law. The sender assumes full responsibility.

iDiv is committed to establishing and maintaining a diverse and inclusive community that collectively supports and implements our mission to do great science. We will welcome, recruit, develop, and advance talented staff from diverse genders and backgrounds.

### **Privacy information**

*The personal data contained within your application documents or obtained during the interview will be processed exclusively for the purposes of the selection process for the position advertised. The legal basis for such data processing is Section 11(1) of the Saxon Data Protection Implementation Act (Sächs DSDG) in conjunction with the EU General Data Protection Regulation (GDPR). The controller for the application process within the meaning of the GDPR is the addressee of the application, as specified in the respective advertisement. When processing your application, your personal data will be passed on within Leipzig University to*

- members of the selection committee
- the human resources management teams
- the Commissioner for Equal Opportunities
- the Disability Officers 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 with regard to your personal data: right of access (Art. 15 GDPR); right to rectification of inaccurate personal data (Art. 16 GDPR); right to erasure (Art. 17 GDPR); right to restriction of processing (Art. 18 GDPR); and right to object to processing (Art. 21 GDPR). If you have any questions, please contact the Data Protection Officer at Leipzig University (office: Augustusplatz 10, 04109 Leipzig). You also have the right to lodge a complaint with the Saxon Commissioner for Data Protection.*