

PhD Position in the Institutional & Behavioural Economics group at ZMT Bremen (Field and Laboratory Experiments; TVL 13/2)

The Leibniz Center for Tropical Marine Ecology GmbH (Leibniz-ZMT GmbH) in Bremen is a member of the Leibniz Association, which is supported by the German Federal and State Governments. Through its research, Leibniz-ZMT GmbH contributes to developing science-based strategies for sustainable use of tropical coastal systems.

The newly established working group “Institutional & Behavioural Economics” is looking for an economist who wants to do laboratory experiments on cooperative behaviour at the Social Science Lab at Jacobs University. The candidate will analyse adaptation to climate change when resource users face a gradual change vs. a shock in the ecological system they are operating in or when uncertainty increases. The Project is a joint venture with the System Ecology group at ZMT, which is using the experimental data for elaborating the yet existing resource model further.

How people react to environmental change is an unresolved question. How do people perceive environmental changes and are they able to react to these changes appropriately? Does higher environmental scarcity lead to a higher or lower level of cooperation among resource users? There are historical case studies showing that both circumstances can potentially occur depending on a set of broader context variables. However, identifying context factors that enable to manage environmental change or scarcity and to establish a causal link between scarcity, variability and cooperation is impossible with case studies, due to simultaneity of events and reverse causalities.

We therefore plan economic laboratory experiments in which the resource dynamics and these “other factors” can be controlled. One major focus of our research will be to compare the harvesting behavior of the players for a slow and gradually changing resource versus a resource that is affected by external shocks and disturbances. Participants can further react to expected or real environmental changes by sanctioning other people at own cost, or by voting for external regulations. We hypothesize that observability of change influences adaptation and that people in real life form beliefs about the availability of resource units in the future. These beliefs often do not adapt to changing environmental conditions and are influenced by other peoples’ beliefs. To account for these important aspects, we plan further experimental treatments in which beliefs are manipulated with different information.

To ensure similarity to real life situations, monetary incentives for participants are a decisive characteristic of economic experiments. The experiments are run on computers, employ students as participants and involve an imposed set of fixed rules. The high degree of control that is desired in the laboratory environment, however, comes with the drawback of a lack in realism. Thus, it has become increasingly popular to conduct experiments with real resource users (artefactual field experiments) and/or to frame the experimental design according to the particular field context (framed field experiments). One integral part is, thus, to translate the laboratory experiments into easy understandable pen-and-paper experiments that can be conducted with different communities

of fishermen being exposed to different environmental challenges. Moving the experimental lab to the field enables us to further investigate the above mentioned “other factors”.

The PhD candidate will get a three years contract (TVL13/2). The contract can start the first of January. The PhD in Economics will be done at the School of Humanities and Social Sciences at the Jacobs University Bremen. We expect the ability to work in a team, good communication and writing skills in English (TOEFL test for Jacobs required), basic analytical skills in econometrics, experimental design and empirical research methods, particularly commitment for the project and a general interest in the research goal of ZMT.

The Leibniz-ZMT GmbH is an equal opportunity employer. Disabled persons with comparable qualification receive preferential status.

Your application should include a cover letter stating your motivation and a CV and two letters of reference. Please send it as a single pdf file by e-mail to bjoern.vollan@zmt-bremen.de Please don't hesitate to contact us for further information.