The Max Planck Institute for Biogeochemistry (MPI-BGC) in Jena is dedicated to interdisciplinary fundamental research in the field of Earth system sciences with a focus on climate and ecosystems. The internationally renowned institute, which currently employs around 230 people, will celebrate its 25th anniversary in 2022. Jena is known for high-tech industry, internationally renowned research institutions and a modern university, but it also has a beautiful natural setting in the green Saale valley with steep limestone slopes. The city of Jena has an active student scene and a diverse cultural life. For the research group Biosphere Theory and Modelling (BTM) we are looking for a

Scientific PostDoc (m/f/d)
(full-time, 3 years)

Background and position description:
The Biosphere Theory and Modeling (BTM) group investigates how the Earth functions as a whole system, the role of life within it, and what a sustainable human future might look like. To do this, we take a unique Earth system approach that focuses on energy and thermodynamics. Previous work by our group has shown that thermodynamics and its fundamental limits strongly determine the dynamics of the Earth system, and thus also the exchanges between land, ecosystems, and the atmosphere. From this, very simple but physically sound models can be developed that can be applied to the study of land-atmosphere exchange and interactions, the function of the hydrologic cycle, the role of vegetation, and to questions about climate change.

We are seeking a motivated and interested person to help us further develop this approach, evaluate it using observational data, and/or compare it to climate model results. The position is not project-based and therefore offers freedom for the exact thematic focus within the applications of the thermodynamic approach.

Your tasks:
- Evaluation of the approach with FluxNet observations, climate data sets, and/or climate model simulations
- Further development of the approach and applications to topics in land-atmosphere-vegetation interactions, climate change, and/or other anthropogenic forcings
- Write and publish scientific papers in leading international journals
- Present results at national and international conferences
- Co-supervising undergraduate and graduate students
- Contribute to broader activities to bring thermodynamics and simple modeling approaches to Earth system science, e.g., by organizing workshops, establishing and continuing collaborations, or developing project proposals
- Opportunity to contribute to teaching

Your profile:
- Completed scientific higher education degree (PhD) in environmental/natural sciences (e.g., meteorology, geocology or other geosciences, environmental and natural sciences, environmental physics)
- Experience with data analysis of observations or climate models
- Expertise in climatology, boundary layer meteorology, hydrology, or terrestrial ecology is beneficial
• Ability to work independently with scientific curiosity
• Excellent written and spoken English skills are essential

Our offer:
Full-time position for 3 years, suitable for PostDocs, with desired start date 01 June 2022. Part-time work is generally possible. The position will be evaluated and graded following the collective agreement according to TVöD Bund; in addition, we will provide a pension plan based on the public service (VBL).
The Max Planck Society (MPS) strives for gender equality and diversity. The MPS aims to increase the proportion of women in areas where they are underrepresented. Women are therefore explicitly encouraged to apply. We welcome applications from all fields. The Max Planck Society has set itself the goal of employing more severely disabled people. Applications from severely disabled persons are expressly encouraged.

Your application:
Are you interested? If you have any questions, please do not hesitate to contact Dr. Axel Kleidon (axel.kleidon@bgc-jena.mpg.de). Please send us your complete application by March 31, 2022, quoting the reference number 10/2022 to bewerbung@bgc-jena.mpg.de or to the

Max-Planck-Institut für Biogeochemie
Personalbüro: Kennwort “Wissenschaftlicher PostDoc”
Hans-Knöll-Straße 10
07745 Jena

All applications should be in English and include in one PDF file (max. size 15 MB) at least the following:

1. Cover letter (2 pages max., describing your motivation, research interests, and relevant experiences)
2. Curriculum vitae (4 pages max., including contact details of at least two scientific references)
3. Scans of certificates, diplomas, and other (e.g., PhD/MSc/BSc certificate. If not in English or German, please provide a translation)

The evaluation of applications will begin on April 01, 2022.

We kindly ask you not to submit copies of your application documents only, as your documents will be destroyed in accordance with data protection regulations after completion of the application procedure.

We look forward to receiving your application!