



## 3-year Post-Doc position (100% TV-L E13) at Freie Universität Berlin

### Process-based modelling of ecosystem stability and resilience

Are you fascinated by the properties and mechanisms that stabilize ecosystems and their functioning? Are you experienced in the development or the application of trait-based ecosystem simulation models? Are you excited about developing your own research agenda in ecological modelling? Then, we might have the right position for you!

In the **Theoretical Ecology group at FU Berlin** (<http://bit.ly/fu-theoretical-ecology>), we are looking for a **theoretical ecologist/ecological modeller** with interest and experience in **process-based simulation modelling** who seeks the understanding of the **stability and resilience of terrestrial ecosystems under disturbances and ongoing global change**.

We typically use process-based simulation models to understand the dynamics and biodiversity of ecosystems. The aim is to improve our understanding of ecosystems and to assess potential impacts of global change on biodiversity and ecosystem functions. We are looking for a colleague who broadens and extends our modelling expertise and whose research focuses on the stability and resilience of terrestrial ecosystems. You should use process-based modelling to link plant traits and their diversity to processes and ecosystem functions, and quantify their response to disturbances or global change. The aim is to develop a better understanding of which ecological mechanisms lead to increased ecosystem resilience and thus contribute to the further development of ecological theories in this field.

#### Your tasks

- Development and/or application of a process- and trait-based simulation model of a terrestrial ecosystem under disturbance, climate change, or land use change
- Publication of research results and presentation of research results in courses
- Establishment of and participation in scientific collaborations
- Support for acquisition of third-party funding
- (Co)-Supervision of theory-driven Bachelor and Master theses on ecosystem dynamics and ecosystem resilience
- Independent teaching at the Bachelor and Master level

#### Your profile

- PhD in biology, ecology or a related field
- A focus of your past and on-going research on process-based vegetation modelling
- Knowledge of ecological theories of ecosystem resilience and stability
- A strong interest in methods and theories in ecology
- Strong skills in statistical analyses of data and/or simulation results, preferably in R
- A strong publication record relative to your academic age
- Experience with state-of-art methods for model calibration and validation, e.g. remote sensing, machine learning, (approximate) Bayesian analyses
- Experience in academic teaching

For further information, please contact Britta Tietjen ([britta.tietjen@fu-berlin.de](mailto:britta.tietjen@fu-berlin.de)). The position will be filled as soon as possible with a deadline for applications on the 26.07.2021 (official German job announcement at <https://bit.ly/3cQcvKJ>). Payment is according to the German public tariff (100% TV-L E13). Applications should be submitted via email, and preferably as single pdf-file to Prof. Dr. Britta Tietjen, Theoretical Ecology, Freie Universität Berlin: [sandra.kries@fu-berlin.de](mailto:sandra.kries@fu-berlin.de)) with the identifier 21221100/24/21. Applications should include a letter of motivation (1 page), a summary of your research visions including potential connections and synergies with ongoing work at the Theoretical Ecology group (1-2 pages), a CV, contact details of two references, transcripts or degree certificates including grades and proofs of special qualifications. Freie Universität Berlin is an equal opportunity employer and specifically encourages female candidates to apply. Disabled persons will be preferred in case of equal qualification.