



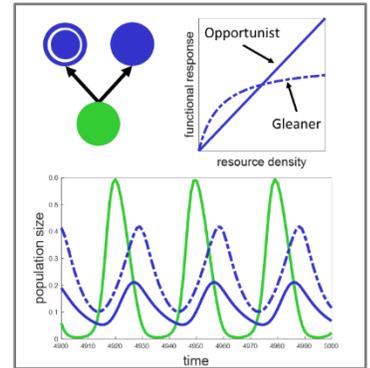
# Open PhD position in Theoretical Ecology

3-years position (65%) | E13 TV-L | Potsdam close to Berlin



**Project Title:** Species coexistence through gleaner-opportunist trade-offs in structurally, spatially and evolutionarily extended communities

**Project Description:** Community ecology seeks to understand the mechanisms that underlie the astonishing diversity of species observed in natural systems. For example, resource fluctuations may allow the coexistence of two different consumers when associated with a gleaner-opportunist trade-off in which the opportunist and gleaner are favored under periods of high and low resource abundances, respectively. While the simplicity of the food web allows for a clear understanding of the principle mechanism that enables consumer coexistence, it remains open to what extent this mechanism may promote species coexistence in naturally more complex ecological systems where consumer-resource interactions are embedded in more complex food-web structures and modified by both spatial interactions and eco-evolutionary feedbacks. Advancing our current knowledge on species coexistence thus requires to investigate the various interactions among different ecological processes that jointly shape the composition of natural communities.



The PhD student hired for this project will work with **Dr. Toni Klauschies** and join the [working group](#) of **Prof. Dr. Ursula Gaedke** at the University of Potsdam. The working group has a strong profile in theoretical ecology, allows for a profound co-supervision by various experts in the field and is part of a large international network. The university of Potsdam has one of the largest groups in theoretical ecology. The prospective PhD student will have the opportunity to join the [Potsdam Graduate School](#) (PoGS) allowing for a broad interdisciplinary training of soft skills and early career development. The unique location in Potsdam also naturally generates a fruitful scientific environment.

**Your qualification:** MSc degree in Biology or in other relevant subjects such as Physics, Mathematics or Environmental Science. We are seeking enthusiastic and committed candidates who enjoy ecology and mathematics with good quantitative skills in theoretical ecology and mathematical modelling. The successful candidate is expected to implement and analyze differential equation models with a modern programming language such as Python, MatLab or Mathematica. Very good English writing and communication skills are expected, German is an asset but not essential.



[Dr. Toni Klauschies](#)

**Application:** To apply, send the following documents as a single PDF to [toni.klauschies@uni-potsdam.de](mailto:toni.klauschies@uni-potsdam.de) (the position is open until it is filled)

- Cover letter, including statement of motivation (1 page)
- Detailed curriculum vitae including a description of your pre-knowledge and former research activities
- Certifications of education
- In addition, please provide two letters of recommendation from University faculty /scientists you worked before with (during your degree or as student helper)