

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



## Project Title: Context dependent effects on protective symbiosis driven by predation, competition and parasitism

## **Project Description:**

Symbiosis is a biological interaction which refers to the physical association of individuals from different species that can be positive, negative or neutral to either species. In planktonic systems several symbiotic interactions can occur simultaneously and can interact with each other. We want to study the symbiosis between *Daphnia* and the rotifer *Brachionus rubens* within a multi-species interaction web. *B. rubens* can attach to *Daphnia* which reduces the fitness of *Daphnia*. At the same time both species compete for resources (algae). The attachment becomes more relevant, when a predator of *B. rubens*, *A. brighwelli* (another rotifer) is present because attached *B. rubens* are



protected from predation. The aim is to quantify the costs and benefits for *Brachionus* and *Daphnia* under varying conditions and to better understand symbioses in a community context. Thus, the present project will contribute to a new food web theory which includes density dependence of symbioses. In addition, video analyses will be performed to study the attachment process in more detail.

In the case of final approval, the project is embedded into a network of several experimental and theoretical working groups across Germany conducting regular workshops and meetings. The prospective PhD student will join the working group of <u>apl. Prof. Dr. Guntram Weithoff</u> at the University of Potsdam. We provide an active research environment covering a broad range in ecological research. Beyond that, the <u>Potsdam Graduate School</u> (PoGS) offers a broad program on interdisciplinary training in soft skills and early career development.

**Your qualification:** MSc degree in Ecology preferably in Aquatic Ecology or a related field. We are looking for a motivated candidate with good experimental skills. Further relevant skills are: sound knowledge in conceptional ecology, statistics and very good English in writing and communication

**Application:** To apply, please send the following documents as a **single PDF** to <u>weithoff@uni-potsdam.de</u> (the position is open until it is filled)

- Cover letter, including a statement of motivation and from when on you would be available
- Curriculum vitae including information on relevant skills
- Certificates of education
- If possible, provide letters of recommendation from previous supervisors