

PhD position in Community Ecology (3 years):

Community interaction webs based on functional groups

Closing date for applications: 16 October 2009

This PhD position will focus on the development of a procedure to determine functional groups and the reliability of interaction webs including all trophic levels. Interaction webs are more general than food webs since they include also non-trophic relationships. Based on functional groups (FG), they represent the highest possible abstraction level to describe and compare (i.e. to model) complete communities. The type of FG we use does not simply represent a lumping together of bulk abundances of functionally similar species, but instead form abundance matrices representing all member species of a FG and so retaining detailed information each single species may contribute to the properties of a FG. Due to the independence of species identity, FGs can ideally be used for system comparisons across long time periods or along large geographic distances. This enables us to study global change effects on biodiversity along climate gradients on community level. The methodology will be tested in collaboration with colleagues from different continents.

We look for a highly motivated person with a strong interest in community ecology and with some mathematical skills. He/she should have a master (Diploma or equivalent) in biology/ecology, environmental sciences, bioinformatics, (bio)statistics, (bio)mathematics, or a related discipline, with an ecological background. Since there are extensive amounts of data available, this PhD research does not necessitate any field work but requires experience in modeling and advanced statistics (preferably using R or S-PLUS), dealing with big data sets, and the ability to thinking in terms of community ecology.

Since in our group we appreciate team spirit, a friendly and relaxed atmosphere we would like to welcome an open minded and pleasant person. Working language is English or German, but fluency in English (spoken and written) is required. The position can be started immediately but not later than on December 1st. More administrative and other details upon request.

Please send the usual application materials (cover letter, CV, (possible) list of publications, and names and email-addresses of two references) to:

Winfried Voigt (e-mail: winfried.voigt@uni-jena.de), Institute of Ecology, Friedrich-Schiller-University of Jena, Dornburger Str. 159, D-07743 Jena.

For more information about the Institute of Ecology please visit our homepage <http://www.uni-jena.de/ecology.html>.