Job posting

Type of position
- ☒ scientific
- ☐ administrative

Target group
- ☒ graduates
- ☐ post docs
- ☐ other

Title
PhD student in Agroecosystem Modelling (m/f/d)

Institution
The mission of the Leibniz Centre for Agricultural Landscape Research (ZALF) as a nationally and internationally active research institute is to deliver economically, environmentally and socially sustainable agriculture – together with society. ZALF is a member of the Leibniz Association and is located in Müncheberg (approx. 35 minutes by regional train from Berlin-Lichtenberg). It also maintains a research station with further locations in Dedelow and Paulinenaue.

Position
We are offering a PhD position within the project the integrated priority project “Cropping system diversification to increase the resilience of farming systems”. The project aims at gaining knowledge on how to grow mixed cropping systems in Brandenburg, Germany and developing predictive tools to assess their resilience under climate change. The project is composed of three sub-projects, with respective focuses on process understanding, predictive modelling and economic assessment. Within sub-project 2, we aim to develop a mechanistic model to reproduce competition effects in mixed crop stands. We are offering a PhD position to be based within the ZALF Research Platform “Data Analysis and Simulation” in the working group Ecosystem Modelling for three years (TVL13, 65%) starting from April 2021.

Responsibilities
- Develop algorithms that describe crop-to-crop interaction and implement them into a mechanistic agro-ecosystem model
- Analyse crop performance simulations in the light of within-field conditions and weather
- Produce potential yield estimates for downstream economic analysis using the developed model
- Collaborate with PhD students within the project and external partners (University of Bonn, INRAE)
- Contribute to the overarching goals of the research project team
- Publish the results in peer-reviewed scientific journals
Requirements

- Master of science agricultural, geo-, or environmental sciences
- First experience in using simulation models
- Good command of geo- and multi-variate statistics as well as software programming
- Excellent communication skills in English (German is not required)
- Good team work skills and willingness to collaborate across discipline

Application procedure (deadline etc.)

We offer:

- Interdisciplinary working environment that encourages independence
- Opportunity to collaborate within an international network on agro-ecosystem modelling (e.g. AgMIP, ISMC)
- Membership in ZALF’s graduate program (incl. benefit from skill training courses)
- Strong institutional commitment to a good work-life balance
- Classification according to the collective agreement of the federal states (TV-L) EG13 with a 65% weekly working time (including special annual payment)
- A collegial and open-minded working atmosphere in a dynamic research institution

Women are particularly encouraged to apply. Applications from severely disabled persons with equal qualifications are favoured. Please send your application by e-mail including a letter of motivation in English, CV, proof of qualification, transcript of records and certificates, and the names and contact information for three references stating the reference number 96-2020 as one PDF file, max. 5 MB before January 24, 2021 to: Bewerbungen@zalf.de.

Contact

If you have any questions, please do not hesitate to contact: Prof. Dr. Claas Nendel (Phone +49(0)33432/82-355; claas.nendel@zalf.de)