Main responsibilities
The new research group for Theoretical Biology works on modeling ecological and evolutionary processes as well as interactions between them. The group is interested, for example, in mechanisms for the maintenance of species diversity and genetic diversity. Another research area is the biology of small populations. In particular how ecological and evolutionary processes jointly determine the fate of such small populations, that is whether they go extinct or recover in the long term.

There are two open positions for PhD students interested in pursuing research in one of these areas. The specific PhD projects will be defined together with the successful candidates. Examples for research questions are: Under what conditions can loss of genetic variation lead to the extinction of small populations (genetic Allee effects)?

How can we use genome-wide sequence data from multiple species in an ecological community to learn about species interactions?

- Research tasks (75%):
  - Development of eco-evolutionary models
  - Mathematical analysis of models
  - Implementation in a programming language, e.g. in R, C++, Python
  - Simulation studies
  - Collaboration with empirical research groups at the Faculty for Biology
  - Writing scientific publications

- Teaching in Ecology (2 LVS) (20%)

- Organizational tasks in the research group (5%)

Applicant’s profile
The successful candidate is expected to have:

- University degree (by start of position) in a relevant scientific discipline, e.g. biology, mathematics, physics, or bioinformatics
- Interest in both biological and mathematical questions
- Ability to work both independently and as part of a team
- Excellent oral and written communication skills
- Good English skills

The successful candidate should preferably have:

- Programming skills, e.g. in R, Python, or C++
- Experience with mathematical modeling
- Experience in leading exercise sessions/tutorials

Remuneration
Salary will be paid according to Remuneration level 13 of the Wage Agreement for Public Service in the Federal States (TV-L). As stipulated in § 2 (1) sentence 1 of the WissZeitVG (Swed-term employment), the contracts end after a period of three years. In accordance with the provisions of the WissZeitVG and the Agreement on Satisfactory Conditions of Employment, the length of contract may differ in individual cases. The employment is designed to encourage further academic qualification. The positions are advertised as 65 % part-time jobs. In individual cases, this percentage may be reduced on request, as long as this does not conflict with official needs.

Bielefeld University is particularly committed to the career development of its employees. It offers attractive internal and external training and further training programmes. Employees have the opportunity to use a variety of health, counseling, and prevention programmes. Bielefeld University places great importance on a work–family balance for all its employees.

Application procedure
For full consideration, your application (cover letter detailing your motivation and relevant experiences, CV, copies of certificates, and contact details for at least one reference) should be received preferably via email (a single PDF document) sent to meike.wittmann@uni-bielefeld.de by the 24th of August 2017. Please mark your application with the identification code wiss17201.

Please do not use application portfolios and send only photocopies of original documents because all application materials will be destroyed at the end of the selection procedure. Further information about Bielefeld University can be found on our homepage at www.uni-bielefeld.de.

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Bielefeld University has received a number of awards for its achievements in the provision of equal opportunity and has been recognized as a family friendly university. The University welcomes applications from women. This is particularly true with regard both to academic and technical posts as well as positions in Information Technology and Trades and Craft. Applications are handled according to the provisions of the state equal opportunity statutes. Applications from suitably qualified handicapped and severely handicapped persons are explicitly encouraged.