

Helmholtz-Zentrum Dresden-Rossendorf e.V.



With cutting-edge research in the fields of ENERGY, HEALTH and MATTER, around 1,500 employees from more than 70 nations at Helmholtz-Zentrum Dresden-Rossendorf (HZDR) are committed to mastering the great challenges facing society today. The Center for Advanced Systems Understanding (CASUS) is a German-Polish research center for data-intensive digital systems research. The Department of Dynamics of Complex Living Systems is looking for a PhD Student (f/m/d) in mathematical modeling of pattern formation in ecological systems.

PhD Student (f/m/d) in mathematical modeling of pattern formation in ecological systems.

City: Görlitz; Starting Date: 01/02/25; Duration: 3 years; Remuneration: TVöD Bund; Reference number: 2024/153; Closing date: 22/11/24

Working field

- Developing and analyzing system-specific mathematical models for self-organizing ecological systems using reaction-diffusion equations and individual-based approaches (specific study systems will be agreed with the successful candidate)
- Parameterize models using different sources of data for model parameters
- Test model predictions with empirical patterns
- Use models to investigate the ecological consequences of pattern formation for the specific system under study

Requirements

- Completed university studies (Master or Diploma) in the field of Physics, Applied mathematics or related field
- Experience in nonlinear dynamical systems is a plus
- Experience in mathematical modeling of living systems (from microbial populations to ecosystem dynamics) is a plus
- Experience in individual-based simulations and reaction-diffusion systems is a plus
- Previous programming experience is desired
- Interested in collaborative work and ability of working in a team
- Strong communication skills
- Fluent written and spoken English skills

What We Offer

- A vibrant research community in an open, diverse and international work environment
- Scientific excellence and extensive professional networking opportunities
- A structured PhD program with a comprehensive range of continuing education and networking opportunities - more information about the PhD program at the HZDR can be found [here](#)
- The employment contract is permanent with a six-month probationary period
- Salary and social benefits in accordance with the collective agreement for the public sector (TVöD-Bund) including 30 days of paid holiday leave, company pension scheme (VBL)
- We support a good work-life balance with the possibility of part-time employment, mobile working and flexible working hours
- Numerous company health management offerings
- Employee discounts with well-known providers via the platform Corporate Benefits
- An employer subsidy for the "Deutschland-Ticket Jobticket"

Application

We look forward to receiving your application documents (including cover letter, CV, diplomas/transcripts, etc.), which you can submit via our online-application-system: <https://www.hzdr.de/db/Cms?pNid=490&pLang=en&pOid=73101>

Weitere Informationen unter <https://stellenticket.de/188973/>
Angebot sichtbar bis 22.11.2024

