

Paderborn University is a high-performance and internationally oriented university. Within interdisciplinary teams, we undertake forward-looking research, design innovative teaching concepts and actively transfer knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our employees in research, teaching, technology and administration a lively, family-friendly and equal opportunity environment, a lean management structure and diverse opportunities. **Join us to invent the future!**

In the **Faculty of Computer Science, Electrical Engineering and Mathematics** – Department of Electrical Engineering and Information Technology – Group of **Semiconductor Optoelectronic Devices** the following position is to be filled as soon as possible

Research Assistant (f/m/d)

(Salary level according to 13 TV-L)

with 100 % of the regular working hours. This is a qualification position within the meaning of the German Act on Fixed-Term Research Employment Contracts for Academic Staff (Wissenschaftszeitvertragsgesetz "WissZeitVG"), which serves to support the scientific qualification in the post-doctoral phase in the field of Photonics and Optoelectronic Devices. The position is, depending on the qualification achieved to date, initially limited for a period of three years.

Field of activity:

- Collaboration in research and teaching (usually 4 SWS per week)
- Development of spin-controlled optoelectronic devices, in particular anisotropic spin-lasers
- Simulation and characterization of charge carrier, spin and polarization dynamics in coupled laser-cavities
- Investigation of nonlinear and non-Hermitian laser dynamics
- Acquisition of third-party funding

Recruitment requirements:

- Scientific university degree (Master or equivalent) in electrical engineering, physics, laser technology or another relevant degree
- Promotion (PhD) in electrical engineering, physics, laser technology, or a closely related subject
- Postdoctoral experience of at least one year
- In-depth knowledge of the theoretical description of laser dynamics, especially that of anisotropic lasers
- Experience in the field of non-Hermitian photonics
- Advanced programming skills in Matlab and/or Python
- Independent and team-oriented way of working with good communication skills
- Very good written and spoken English skills

We offer:

- Flexible working hours and the individual option of mobile working
- Wide range of health, counseling and prevention services
- Attractive fringe benefits such as childcare facilities and sports activities
- Opportunities for internal and external training and development
- Additional benefits in accordance with the collective agreement of the federal states (TV-L), such as annual bonuses and capital-forming benefits as well as the VBL supplementary pension scheme

Applications from women are particularly welcome and, in case of equal qualifications and experiences, will receive preferential treatment according to state law (LGG), unless there are preponderant reasons to give preference to another applicant. Part-time employment is generally possible. Applications from disabled people with appropriate suitability are explicitly welcome. This also applies to people with equal opportunities in accordance with the German social law SGB IX.

Please send your application documents (preferably in a single pdf file) using the **Ref. No. 7176** until **January 02nd, 2026** to nils.gerhardt@uni-paderborn.de.

Information regarding the processing of your personal data can be located at:
<https://www.uni-paderborn.de/en/zv/personal Datenschutzz>.

Prof. Dr.-Ing. Nils Gerhardt
Faculty of Computer Science, Electrical Engineering and Mathematics
Semiconductor Optoelectronic Devices
Paderborn University
Warburger Str. 100
33098 Paderborn



HR EXCELLENCE IN RESEARCH

