



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!**

With the Institute for Photonic Quantum Systems (PhoQS), the Paderborn University aims to establish an interdisciplinary research center in the field of photonic quantum technologies. The goal is to develop innovative approaches for photon-based quantum applications as well as new theoretical and experimental concepts and research lines. The ultimate focus is on the fundamental understanding and precise control of photonic quantum simulators and quantum computers.

In the **Institute for Photonic Quantum Systems** the following positions are to be filled in the Graduate Program PhoQS FUTURE in Fall 2025:

Up to 15 Research Assistants (PhD positions) (f/m/d)

(Salary level 13 TV-L)

with 75% - 100% of the regular working hours (depending on the project and research field). The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The positions are aimed at obtaining a PhD and are limited for a period of 3 years. An extension is generally possible within the time limits of the WissZeitVG.

The positions are offered in the fields of **experimental and theoretical physics, electrical engineering, computer science** and **mathematics**. Candidates are expected to suggest possible supervisors (PhoQS PIs) as part of the application process. Detailed information on the graduate and scientific program and the team of supervisors is found on the website: <https://phoqs.uni-paderborn.de/en/phoqs-future>.

Your tasks:

- Participation in research relating to any aspect(s) of photonic quantum systems.
- A teaching load of 3 - 4 hours per week.
- Completion of a doctoral thesis in your respective discipline in correspondence to one or more of the relevant research areas.
- Contributions to academic research and dissemination, especially through active conference and workshop participation.
- Active participation in the joint activities of the PhoQS FUTURE Graduate Program.

Your requirements:

- Above-average master's degree or equivalent in one of the involved disciplines.
- Interest in interdisciplinary exchange and willingness to collaborate with others.
- An excellent command of written and spoken English.
- Desirable: experience in the fields of research relevant to photonic quantum systems.

We offer:

- Fully funded scientific staff position (all year round) and social benefits (health insurance, pension scheme, annual bonuses, ...).
- 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
- A structured and interdisciplinary graduate program developed and coordinated with expertise in higher education in STEM.
- An inspiring institutional setting and world leading infrastructure with permanent scientific support staff.
- Financial support for international research stays.
- Personalized support for incoming international students (visa, insurance, house hunting, ...).
- Strong support of the compatibility of family and career as a cornerstone of a productive working environment.

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 using the **Ref. No. 6724** until **December 15, 2024** to future@phoqs.upb.de.

Information regarding the processing of your personal data can be located at:

<https://www.uni-paderborn.de/en/zv/personaldataenschutz>.

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