Paderborn University is a high-performance and internationally oriented university with approximately 20,000 students. 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 more than 2,500 employees in research, teaching, technology and administration a lively, family-friendly, 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 international research center in the field of photonic quantum technologies. The goal is to develop new technologies for photon-based quantum applications as well as new theoretical and experimental concepts and research approaches. The ultimate focus is on the understanding and control of photonic quantum simulators and quantum computers.

Within this scope, we invite applications for the following fixed-term position (100% of the regular working time), which will start at the earliest opportunity:

Senior researcher (f/m/d)
(salary is according to 14 TV-L)

The position is embedded in the project **"Photonic Quantum Computing (PhoQC)"** of the *Ministerium für Kultur und Wissenschaft of the state of Northrhine-Westfalia (MKW NRW).* Employment ends on 31.10.2024 and adheres to the legal regulations laid out in the WissZeitVG.

Specifically, we are looking for a project leader who will drive the development of an integrated junior researcher support concept in the field of "quantum computing" at the Institute for Photonic Quantum Systems (PhoQS). The following are examples of relevant tasks:

- Preparatory work for the planned establishment of a research training group, in particular conceptual design and implementation of a didactic concept in the field of "quantum computing" with participating staff from physics, electrical engineering, computer science and mathematics.
- Conception and implementation of an interdisciplinary Master's specialisation in "Quantum Computing
- Preparatory measures for the establishment of a new Master's programme in "Quantum Computing
- Active support and coordination of the external presentation of the project activities
- Acquisition of, as well as assistance in managing existing, third-party funding
- Assistance training Doctoral, Masters, and Bachelors students
- Teaching on the order of 4 teaching hours (SWS) per week

It is expected for the successful candidate to have an established academic profile and previous experience in at least one of the following areas:

- Physics, especially quantum optics or quantum information (both experiment and theory)
- Computer science, especially quantum information or complexity theory
- Electrical engineering, especially integrated electronic-photonic circuits
- Mathematics

Preference will be given to applicants who have demonstrable experience in working in an interdisciplinary context.

Hiring requirement:
Suitable candidates have completed their Ph.D. (preferably within the last 5 years) and have demonstrated extraordinary scientific achievements after their PhD as well as proven teaching experience. Experience in the acquisition and administration of third-party funding is desirable.

Since Paderborn University seeks to increase the number of female scientists, applications of women are especially welcome. In case of equal qualification and scientific achievements, they will receive preferential treatment according to the North Rhine-Westphalian Equal Opportunities Policy (LGG), unless there are cogent reasons to give preference to another applicant. Likewise, applications of disabled people with appropriate qualification are explicitly requested. This also applies to people with equal status according to the German social law SGB IX.

Please send your application including a CV and list of publications (preferably in a single pdf file) using the **Ref. No. 5135** via e-mail to benjamin.brecht@upb.de

Information regarding the processing of your person data can be located at:
https://www.uni-paderborn.de/en/zv/personaldatenschutz

Dr. Benjamin Brecht
Institute for Photonic Quantum Systems (PhoQS)
Paderborn University
Warburger Str. 100
33098 Paderborn
benjamin.brecht@upb.de