



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!**

The **Faculty of Science**, Department of Physics, Mesoscopic Quantum Optics Group, offers the position of

## Researcher/ PhD student (f/m/d)

(Salary level 13 TV-L)

starting in the autumn of 2024. The position (75% of regular working time) entail a fixed term contract for the duration of the PhD project in the field of superconducting detector arrays, and is initially limited to 3 years depending on previous qualification (according to the German law "Wissenschaftszeitvertragsgesetz"). The work is undertaken as part of the ERC Starting Grant "Quantum Engineering of Superconducting Array Detectors for Low-Light Applications.

### Position Profile:

- Development and characterization of arrays superconducting detectors and associated electronics, for tasks in low-light level optical sensing, quantum metrology and quantum photonics technology

### Your Profile:

- Successful completion of a Masters degree in Physics (or to be completed before taking up the position)
- Experience in the following fields: characterisation of superconducting single photon detectors, design and characterization of cryogenic electronics, quantum and/or classical applications of single-photon-level measurements.

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 by **26<sup>th</sup> July 2024** with **reference 6592** to [tim.bartley@upb.de](mailto:tim.bartley@upb.de).

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

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