Paderborn University is a high-performance and internationally oriented university with approximately 20,000 students. Within interdisciplinary teams, we design forward-looking research, innovative teaching and the active transfer of knowledge into society. As an important research and cooperation partner, the university also shapes regional development strategies. We offer our more than 2,300 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!

The Integrated Quantum Optics Group at the Department of Physics (Faculty of Science) invites applications for the position of a

**PhD-student (m/f/d) in Quantum Optics**
( Salary level 13 TV-L)

starting at the earliest possible date. The position (75 % of regular working time) entails a fixed term contract and is initially limited until the end of the EC quantum flagship project UNIQORN in September 2021.

**Position Profile:**
The PhD-candidate is expected to focus in his/her research on the development of integrated optic components (mostly in periodically poled lithium niobate) for quantum optic applications. This includes development and optimization of fabrication technologies as well as optical characterization. Special focus of the work will be on the development of modules for single-photon detectors via nonlinear frequency up-conversion. The work is embedded within the EC project UNIQORN, which targets the development of affordable quantum optics. Most of the work will be performed in close cooperation with the European project partners.

**Your Profile:**
- Completed university degree in physics (M.Sc. or comparable)
- Experience in experimental optics (preferable quantum optics) and/or microfabrication technologies
- Theoretical knowledge of integrated and quantum optics
- Highly motivated and creative with good communication skills in English
- Eager to work within a multi-national cooperation project

The University of Paderborn is making efforts to increase the proportion of women and therefore encourages qualified women in particular to apply. Applications from women are particularly welcome and, in case of equal qualifications and experience, will receive preferential treatment according to state law (LGG). Qualified disabled people (in the sense of the German social law SGB IX) are also encouraged to apply.

The closing date for applications **26 April 2019**. All application materials, comprising CV, certificates, and a short statement of research experience and interests should be submitted with **Reference No. 3781** in electronic form (as a single PDF document) to:

**Prof. Christine Silberhorn**
Phone: +49 5251 60 5884
Mail: christine.silberhorn@upb.de

www.upb.de