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!

The Faculty of Science, Department of Physics, Integrated Quantum Optics Group, seeks to appoint a

Researcher/Postdoc (f/m/d) (pay scale TV-L 13)

to work on the EU funded FET OPEN project “Spectral-temporal Metrology with Tailored Quantum Measurements” (STORMYTUNE). This is a full-time position limited to the duration of the project (two years), according to the German law “Wissenschaftszeitvertragsgesetz” for fixed term contracts within third party funding.

Duties and responsibilities
Quantum metrology offers the possibility of reaching a measurement precision that is well beyond that of any classical measurement. This lights a path towards novel measurements that may have profound impact on applications ranging from GPS and LIDAR to spectroscopy and astronomy.

You, as the successful candidate, will develop and experimentally realise novel time- and frequency measurements that saturate the quantum Cramér-Rao-bound, the ultimate precision limit for any measurement. Further, you will combine quantum-limited sensing with methods such as compressed sensing to bridge the gap between proof-of-concept experiment and actual technology. Further, you will participate in day-to-day supervision of PhD and Master students as well as day-to-day coordination of the project. In this international project, you will work in a dedicated team of Postdocs and PhD students and post docs led by Prof. Christine Silberhorn and you will collaborate with project partners from across Europe.

Essential requirements
Applicants are expected to hold a PhD in physics or in a related relevant subject at the time of appointment. Experience in either of a combination of quantum optics, ultrafast optics and its applications, quantum metrology, and managing the scientific part of funding proposals (e.g. EU projects) is highly desirable.

Further information
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.

Please send your application by 14.12.2021 with reference 4924 to:
christine.silberhorn@upb.de

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

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