Interested in fascinating quantum effects of structured photons? Eager to work on cutting-edge research in experimental quantum optics?

The Experimental Quantum Optics group is looking for a motivated postdoc to work on fundamental aspects and possible applications of structured light in free space and integrated waveguide systems. Besides performing research on the highest level, the position will provide the opportunity to work in a diverse research group, which is embedded in a highly active research infrastructure.

As an employer we are committed to promoting diversity within our team and would like to encourage all interested applicants, irrespective of their gender and backgrounds to apply!

Who we are!

The Experimental Quantum Optics group is a young research group (est. 2019) working on structured single photons to study novel quantum effects and high-dimensional quantum information schemes. We also develop and implement novel light-matter interactions in the quantum regime, thereby combining findings from nonlinear optics, plasmonics, photonics, and quantum physics.

The group is embedded into an internationally known research hub at the Tampere University, Finland, which is leading the Photonics Flagship PREIN and has multiple collaborations within a large network of quantum science experts across the world.



Interested in joining?

We are looking for a talented and motivated Postdoctoral Researcher to carry out quantum photonics research, where we aim at studying quantum phenomena of single and multi-photon quantum states encoded in polarization and the spatiotemporal domain, i.e., invoking all degrees of freedom of light. In addition, we also encourage and support the candidate in implementing the candidate's own ideas and contribute to ongoing quantum optics experiments, refine your supervising skills as well as to establish your own independent high-level research profile. Candidates must hold an internationally recognized PhD degree (or have the PhD defense scheduled very soon) in quantum optics or photonics. Excellent written and spoken English skills are essential. Knowledge in programming languages, e.g., Matlab or Labview are highly appreciated. Expertise in the quantum information theory and quantum foundations are advantageous. The candidate should further like to work in an international, collaborative research group and help in supervising students and teaching tasks.

The Postdoctoral position will be offered for 1-2 years with a possibility of extension and can be filled immediately.

How to apply?

The full application should be written in English. The required documents are:

- Curriculum Vitae incl. list of publications
- Possible references (incl. the full email address)
- Motivation letter

Please submit your application via the official webpage <u>here</u> (deadline 13th February 2023).

For more question, please contact Robert Fickler (robert.fickler@tuni.fi) as PDF documents.











Finland is among the most stable, free, and safe countries in the world, based on prominent ratings by various agencies. **Tampere** is counted among the major academic hubs in the Nordic countries and offers a dynamic living environment. The city is an industrial powerhouse that enjoys a rich cultural scene, incl. various music festivals, an international theater and film festival as well as a reputation as a centre of Finland's information society.