

Position ID	PhotonQ-Stutt-Postdoc3
Type of position	Postdoc
Subject Area	Experiment
Type of institution	University
Start date	1 March 2022 or after
Type of contract	24 months (extension may be possible)
PI	Prof. Dr. Stefanie Barz
Location	University of Stuttgart
Application deadline	Until position is filled
Position description	<p>Photonic quantum computing</p> <p>Photonic quantum processors allow realizing quantum computing and the implementation of quantum algorithms based on highly entangled photonic states.</p> <p>We are looking for a postdoc to lead our endeavour to realizing quantum computing with single photons.</p> <p>You will:</p> <ul style="list-style-type: none"> ▪ Develop concepts for photonic quantum computing and translate them to optical setups ▪ Build an optical setup to realize a photonic quantum processor ▪ Create and characterize highly entangled photonic resource states as a basis for quantum computing ▪ Implement quantum algorithms ▪ Contribute to project meetings, workshops, and conferences ▪ Build your foundation for future-oriented jobs in research and photonic industries
Requirements	<ul style="list-style-type: none"> ▪ PhD in Physics or related ▪ Experience in experimental quantum optics and (photonic) quantum technologies ▪ Programming skills (Python, Mathematica, Matlab, ...) ▪ Interest in supervision of PhD students and leading a small team ▪ Interest in collaborative and interdisciplinary research
Application documents	<ul style="list-style-type: none"> ▪ Short statement of research interests (max. 1 page) ▪ CV ▪ Certificates or transcript of records ▪ Contact details of three referees
Application email	Please send your application to: barz@fmq.uni-stuttgart.de
Contact email	For additional questions, please contact: barz@fmq.uni-stuttgart.de