

Position ID	PhotonQ-Stutt-PhD1
Type of position	PhD
Subject Area	Experiment
Type of institution	University
Start date	1 March 2022 or after
Type of contract	36 months
PI	Prof. Dr. Stefanie Barz
Location	University of Stuttgart
Application deadline	Until position is filled
Position description	<p>Integrated photonic technologies for quantum computing</p> <p>Integrated photonics is key to scaling up photonic quantum technologies, in particular photonic quantum processors.</p> <p>We are looking for a PhD student to join our endeavour to building integrated photonic circuits for quantum computing.</p> <p>You will:</p> <ul style="list-style-type: none"> ▪ Design integrated photonic circuits to build a photonic quantum processor ▪ Realize a state-of-the-art setup for characterising integrated photonic circuits ▪ Test circuits and operate them on a single-photon level ▪ Run quantum computations with your circuits ▪ Build your foundation for future-oriented jobs in research and photonic industries
Requirements	<ul style="list-style-type: none"> ▪ MSc in Physics or related ▪ Ideally: Experience in experimental quantum optics and (photonic) quantum technologies ▪ Interest in integrated photonics and in designing and testing photonic circuits ▪ Programming skills (Python, Mathematica, Matlab, ...) ▪ 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