

TG Single Photons Overview

TG Leader	Stefan Kück
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TG Activities

- Establish Niedersachsen Single Photon Fiber Network;
- Utilize collaboration for creating the best sources and detectors;
- Support the CRC Quantum Precision
- Initiate a new 3rd party funding proposal

TG Competences/Services

- Kück, Ding, Schell: Micro-photoluminescence and single-photon spectroscopy
- Ding: Growth of III-V semiconductor nanostructures
- Ding, Schell: Micro- and Nanofabrication
- Chichkov: Laser micro-processing
- Schell: Photonic integration of quantum emitters

Involved QF Members

Members	Institution	Relevant Expertise
Stefan Kück , Leader	PTB	Molecule based quantum radiometry; metrological characterization of array-type single-photon sources
Markus Etzkorn,	TUBS	Advancing TEM characterization
Beatrice Rodiek	PTB	Molecule based quantum radiometry; metrological characterization of array-type single-photon sources
Marco Lopez	PTB	single-photon metrology
Franziska Hirt	PTB	Molecule based quantum radiometry; metrological characterization of array-type single-photon sources
Justus Christinck	PTB	Diamond-based single-photon sources
Fei Ding	LUH	Intensity-squeezed single photon sources based on quantum dots; Niedersachsen Quantum Link
Michael Zopf	LUH	Niedersachsen Quantum Link
Tobias Voss	TUBS	Molecular Quantum Emitters on GaN-based devices
Uta Schlickum	TUBS	Light Excitation at the Single Molecular Level; Photon-STM investigations of III-V Semiconductors: growth and characterization of single photon sources
Mike Stummvoll	TUBS	characterization of single photon sources
Andreas Reutter	TUBS	characterization of single photon sources
Andreas Schell	PTB/LUH	Spectroscopy and photonic integration of quantum emitters

Pablo Tieben	PTB/LUH	Spectroscopy of quantum emitters
Boris Chichkov	LUH	Nanoscale Materials Processing
Andreas Hangleiter	TUBS	Deterministic Quantum Dots
Samar Hagag	TUBS	Deterministic Quantum Dots