

TG Electron Microscopy Overview

TG Leader	Markus Etzkorn
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TG Activities

- Coordinate TEM characterization capabilities at LUH, PTB and TUBS
- Develop scalable methods for structure determination of nanostructures in 1, 2, and 3 dimensions
- Calibrate nanometric lengths
- Perform TEM measurements of quantum dots

TG Competences/Services

- Dual beam focussed ion beam (FIB)
- Scanning Electron Microscope
- Ion and electron detectors
- Transmission electron microscope

Involved QF Members

Members	Institution	Relevant Expertise
Markus Etzkorn, Leader	TUBS	Advancing TEM characterization
Daesung Park	PTB	Advancing TEM characterization
Fritz Schulze-Wischeler	LUH	Advancing TEM characterization
Andreas Hangleiter	TUBS	Deterministic Quantum Dots
Tobias Voss	TUBS	Molecular Quantum Emitters on GaN-based devices
Andreas Waag	TUBS	Coherent Light Field Control; Nanophotonics for Atom and Ion Manipulation; Hybrid integration of GaN LEDs with conductive substrates
Meinhard Schilling	TUBS	Electronic Quantum Metrology; Optical Voltage Standard - Fast Prototyping and HTS Superconductors
Frank Ludwig	TUBS	Characterization of and investigation of dynamic magnetic properties of magnetic nanoparticles; Magnetic Particle Imaging (MPI)
Harald Bosse	PTB	Nanometrology
Marc Christoph Wurz	LUH	Development of compact vacuum pumps, pressure measurement devices and miniaturized Rb sources; Atom-Chip Based Gravimeters and Inertial Sensors
Alexander Kassner	LUH	Atom-Chip Based Gravimeters and Inertial Sensors
Rolf Haug	LUH	Two-dimensional materials, Electrical Quantum Effects, Magnetic Quantum Effects