TG Non-classical Light Overview

TG Leader	Henning Vahlbruch

TG Activities

Generation of squeezed states of light tailored for the application in

- Gravitational wave detectors
- Sub-standard quantum limit interferometry
- Quantum information
- Measurement induced entanglement / entanglement swapping
- Quantum teleportation
- High-precision spectroscopy

Investigation of decoherence effects to go beyond the current limits.

Involved QF Members

Members	Institution	Relevant Expertise
Henning Valbruch, Leader	AEI/LUH	Generation of squeezed states
Harald Lück	AEI/LUH	Next Generation Gravitational Wave Observatories; Sub-Standard Quantum Limit Interferometry
Benno Willke	AEI/LUH	Squeezed Light Sources; Advanced Light Sources
Marina Trad Nery	AEI/LUH	Advanced Light Sources
Moritz Mehmet	AEI/LUH	Squeezed light sources
Joscha Heinze	AEI/LUH	Squeezed light sources
Fabian Meylahn	AEI/LUH	Squeezed light sources
Japser Venneberg	AEI/LUH	Squeezed light sources
Michèle Heurs	AEI/LUH	Backaction-Evading Techniques
Jonas Junker	AEI/LUH	Backaction-Evading Techniques
Dennis Wilken	AEI/LUH	Backaction-Evading Techniques