Tobias Gehring - DTU Orbit (12/02/2018)

Tobias Gehring
Assistant Professor
Department of Physics
Quantum Physics and Information Technology

Postal address:
Fysikvej
309, 212
2800
Kgs. Lyngby
Denmark

Email: tobias.gehring@fysik.dtu.dk
Mobile: +45 9351 1649

Publications:

Deterministic phase measurements exhibiting super-sensitivity and super-resolution
Publication: Research - peer-review › Journal article – Annual report year: 2018

Nitrogen-vacancy ensemble magnetometry based on pump absorption
Publication: Research - peer-review › Journal article – Annual report year: 2018

Qudi: a modular python suite for experiment control and data processing
Publication: Research - peer-review › Journal article – Annual report year: 2017

Towards an integrated squeezed light source
Publication: Research - peer-review › Journal article – Annual report year: 2017

Ultrasensitive and broadband magnetometry with cavity optomechanics
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

30 years of squeezed light generation
Publication: Research - peer-review › Journal article – Annual report year: 2016

Continuous-variable quantum computing on encrypted data
Publication: Research - peer-review › Journal article – Annual report year: 2016

4654–4663
Publication: Research - peer-review › Journal article – Annual report year: 2017

Phase measurements exhibiting super sensitivity and super resolution features
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

Single-quadrature continuous-variable quantum key distribution
Publication: Research - peer-review › Journal article – Annual report year: 2016

Ab initio quantum-enhanced optical phase estimation using real-time feedback control
Publication: Research - peer-review › Journal article – Annual report year: 2015

Continuous Variable Quantum Key Distribution with a Noisy Laser
Publication: Research - peer-review › Journal article – Annual report year: 2015
High-rate measurement-device-independent quantum cryptography
Publication: Research - peer-review › Journal article – Annual report year: 2015

Implementation of continuous-variable quantum key distribution with composable and one-sided-device-independent security against coherent attacks
Publication: Research - peer-review › Journal article – Annual report year: 2015

Quantum cryptography with an ideal local relay
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Reply to 'Discrete and continuous variables for measurement-device-independent quantum cryptography'
Publication: Research - peer-review › Comment/debate – Annual report year: 2015

Projects:

Error Reconciliation Protocols for Continuous-Variable Quantum Key Distribution
Project: PhD

Implementation of fiber-based continuous-variable quantum key distribution protocols
Project: PhD

Generation of Macroscopic Squeezed States for Quantum Sensing
Project: PhD

On-Chip quantum communication
Project: PhD

On-Chip quantum communication
Project: PhD