



**18.10.2017**  
**Einstein-Kabinett**  
Rudower Chaussee, 17  
12489 Berlin-Adlershof

# QUANTUM OPTICS AND SECURE OPTICAL DATA TRANSMISSION

Handlungsfeldkonferenz  
Photonik für Kommunikation und Sensorik

# QUANTUM OPTICS AND SECURE OPTICAL DATA TRANSMISSION

Handlungsfeldkonferenz Photonik für Kommunikation und Sensorik

18.10.2017 | PROGRAMME

09:30 – 10:00	<b>Registration / Exhibition / Coffee</b>
10:00 – 10:20	<b>Welcome and introduction</b> Dr. Henning Schröder, Fraunhofer IZM Dr. Frank Lerch, Cluster Optik und Photonik / OpTecBB e.V.
10:20 – 10:40	Innovation and funding areas of quantum optics in Germany Lars Unnebrink, VDI Technologiezentrum GmbH
10:40 – 11:00	Overview of quantum nano photonics (in Berlin und Brandenburg) Prof. Dr. Stephan Reitzenstein, TU Berlin
11:00 – 11:20	UK National Quantum Technology Programme and QuantIC Prof. Miles J. Padgett, University of Glasgow
11:20 – 11:50	<b>Coffee break &amp; Exhibition</b>
11:50 – 12:10	Quantum optical sensors and relevant laser technology Dr. Andreas Wicht, Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik (FBH)
12:10 – 12:30	Controlling tomorrow's quantum machines: Injecting software development lessons into quantum optics Dr. Robert Jördens, QUARTIQ GmbH
12:30 – 12:50	Single photon counting applied to optical quantum technologies Dr. Michael Wahl, PicoQuant GmbH
12:50 – 13:10	Quantum devices and their variety of application in science Prof. Yoshihiro Takiguchi, Hamamatsu Photonics/GPI/OPTONEXT HAMAMATSU
13:10 – 14:10	<b>Lunch &amp; Exhibition</b>
14:10 – 14:30	Commercialisation of quantum technologies Dr. Robin Head, M Squared
14:30 – 14:50	Future miniaturized diode-laser systems for quantum sensing applications Dr. Patrick Leisching, TOPTICA Photonics AG
14:50 – 15:10	Quantum communications in telecom fibre-optic networks Andrew Shields, Toshiba Europe
15:10 – 15:30	Free-space and hand held quantum optical devices Prof. Dr. Harald Weinfurter, Ludwig-Maximilian University of Munich (LMU)
15:30 – 16:00	<b>Coffee break &amp; Exhibition</b>
16:00 – 16:20	Test and measurement equipment for quantum optics research and development Felix Lenze, Tektronix GmbH
16:20 – 16:40	Secure datacenter interconnect Michael Roth, ADVA Optical Networking SE
16:40 – 17:00	From silicon photonics towards quantum optics -Research in CMM-FBK George Pucker, Centre of Materials and Microsystems, Fondazione Bruno Kessler, Povo-Trento, Italia
17:00 – 17:20	Optimization of quantum optical devices with machine learning approaches Dr. Philipp-Immanuel Schneider, JCMwave GmbH
17:20 – 17:40	Implementation of quantum photonics devices with rare earth ions doped solids. Dr. Margherita Mazzera, ICFO, The Institute of Photonic Sciences and the Barcelona Institute of Technology

**17:40 – 18:00**

**Countdown to Quantum Supremacy: An Update from the Google Quantum Artificial Intelligence Lab**  
Dr. Hartmut Neven, Google

**Ab 18:00**

**Photonic Days Evening reception at WISTA Bunsensaal**

The workshop language is English. Admission to the event is free, but early [registration](#) is required.

**Venues:**

WISTA – Einstein-Kabinett  
Rudower Chaussee 17  
12489 Berlin

**Contact person:**

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regionale Entwicklung

Dieses Projekt wird aus Mitteln der Länder Berlin und Brandenburg gefördert,  
kofinanziert von der Europäischen Union – Europäischer Fonds für Regionale  
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## RÜCKANTWORT

# Handlungsfeldkonferenz Photonik für Kommunikation und Sensorik

„Quantum optics and secure optical data transmission“

**Mittwoch, 18. Oktober 2017**

WISTA, Raum ...  
Rudower Chaussee 17  
12489 Berlin-Adlershof

**Online-Anmeldung unter:**

[http://optecbb.de/lang/de/anmeldung\\_20171018\\_hfk\\_phokos.php](http://optecbb.de/lang/de/anmeldung_20171018_hfk_phokos.php)

**Anmeldung bitte bis zum 13.10.2016**

**ODER direkt an:**

Herrn Reschke, OpTecBB e.V.

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Name, Vorname:

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Titel:

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Institution/Firma:

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Anschrift:

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Tel./FAX:

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