



© TU Berlin, AG Optoelektronik und Quantenbauelemente

## WORKSHOP

# QUANTUM OPTICS AND SECURE OPTICAL DATA TRANSMISSION

**18th October 2017**

WISTA  
Rudower Chaussee 17  
12489 Berlin

Part of the Photonic Days Berlin Brandenburg  
THE WORKSHOP WILL BE HELD IN ENGLISH

## Program, 18.10.2017

<b>09:30 - 10:00</b>	<b>registration // exhibition// coffee</b>
10:00 - 10:20	Welcome and introduction Dr. Henning Schröder, Fraunhofer IZM Dr. Frank Lerch, Cluster Optik/OpTecBB
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
<b>11:20 - 11:50</b>	<b>Coffee break and 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
<b>13:10 - 14:10</b>	<b>Lunch and 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	Secure datacenter interconnect Michael Roth, ADVA Optical Networking SE
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>Kaffeepause und Ausstellung</b>
16:00 – 16:20	Test and measurement equipment for quantum optics research and development Dr. Klaus Engenhardt, Tektronix GmbH
16:20 – 16:40	Quantum communications in telecom fibre-optic networks Andrew Shields, Toshiba Europe
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	Quantum computing, N.N., Google (tbc), IBM (tbc), ICFO (tbc)
17:40 -	<b>Wrap up, final discussion, networking</b>
18:00	<b>Photonic Days Evening reception at WISTA</b>

Registration

**Workshop**

**Photonics for communication and sensor applications**

**Quantum optics and secure optical data transmission**

Wednesday, 18th October 2017

WISTA

Rudower Chaussee 17

12489 Berlin

Please reply before October 13th 2017 to OpTecBB

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

Or mail to OpTecBB e.V., Hr. Reschke: [optecbb@optecbb.de](mailto:optecbb@optecbb.de), Fax: +49-30-6392-1729

Name, first name:

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Title:

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Institution/company:

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Address:

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Tel./fax:

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E-mail:

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Dieses Projekt wird im Rahmen der "Gemeinschaftsaufgabe zur Verbesserung der regionalen Wirtschaftsstruktur" (GRW) häufig mit Mitteln des Bundes und des Landes Berlin finanziert.