



© 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

09:30 - 10:00	registration // exhibition// coffee
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
11:20 - 11:50	Coffee break and exhibition
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	Lunch and exhibition
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	Coffee break and exhibition
16:00 – 16:20	Test and measurement equipment for quantum optics research and development Dr. Klaus Engenhardt, 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
18:00	Photonic Days Evening reception at WISTA

Registration

Workshop

Photonics for communication and sensor applications

Quantum optics and secure optical data transmission

Wednesday, 18th October 2017

WISTA

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12489 Berlin

Please reply before October 13th 2017 to OpTecBB

Online registration: http://optecbb.de/lang/de/anmeldung_20171018_hfk_phokos.php

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

Name, first name:

Title:

Institution/company:

Address:

Tel./fax:

E-mail:



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