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**Press Release**

**PicoQuant to hold the 1st International Symposium on**

**“Single Photon based Quantum Technologies”**

**Researchers from all over the world will meet in Berlin from May 30 to June 1, 2018 to present and discuss recent developments in single photon based quantum technology.**

**Berlin (Germany), 21 July 2017** – The aim of this new symposium is to provide an interdisciplinary platform for exchanging experience and information as well as sharing recent findings in the field of single photon based quantum technologies. Ten distinguished researchers from Europe and the USA will present their recent work in this field. The invited speakers for this first edition of the workshop are Ivo P. Degiovanni, Mark Fox, David Gershoni, Ronald Hanson, Wolfram Pernice, Andrew Shields, Christine Silberhorn, Varun Verma, Ian Walmsley, and Ronald Walsworth.

Contributed oral presentations as well as a poster session round out the symposiums scientific program, while a welcome reception provides participants with the opportunity for further discussions with the invited speakers and other attendees. Registration for the 1st International Symposium on “Single Photon based Quantum Technologies” will open in October 2017.

The first generation of quantum technologies such as transistors, solid-state lighting, lasers, or GPS have dramatically changed the world during the last 50 years. Today, we are paving the way for a second revolution by starting to exploit quantum phenomena such as superposition or entanglement. Breathtaking advances in creating and manipulating dedicated entangled and/or superimposed quantum states will lead to new technologies that promise to change our society in the next 5-20 years through revolutionary breakthroughs in imaging, sensing, communication, simulation and computation. However, we are still at the beginning of transferring theory into technology in many of the related research fields.

**Date:** May 30-June 1, 2018  
**Location:** Max Born Saal, Max-Born-Str. 2A, 12489 Berlin  
**Contact:** PicoQuant GmbH  
 Kerstin Wicht  
 [http://www.quantum-symposium.org](http://www.quantum-symposium.org/)  
 [events@picoquant.com](mailto:events@picoquant.com)

**Further details**

***Invited speakers***

* [Ivo P. Degiovanni (INRIM, Italy)](http://www.researchgate.net/profile/I_Degiovanni/)  
  "Quantum Metrology vs. Quantum Enhanced Measurements (with Photons)"
* [Mark Fox (University of Sheffield, UK)](https://www.sheffield.ac.uk/physics/contacts/mark-fox)  
  "On-chip quantum photonics with integrated quantum-dot single-photon sources"
* [David Gershoni (Technion Israel Institute of Technology, Israel)](http://phsites.technion.ac.il/gershoni/)  
  "Deterministic generation of a cluster state of entangled photons, using semiconductor quantum dots"
* [Ronald Hanson (TU Delft, The Netherlands)](https://qutech.nl/hanson-lab/welcome/)  
  „Quantum networks“
* [Wolfram Pernice (University Münster, Germany)](http://www.uni-muenster.de/Physik.PI/Pernice/index.html)  
  "Waveguide integrated single photon detectors"
* [Andrew Shields (Toshiba Research Europe Ltd., UK)](http://www.toshiba.eu/eu/Cambridge-Research-Laboratory/Quantum-Information-Group/)  
  "Quantum Communications based on Semiconductor Devices"
* [Christine Silberhorn (University Paderborn, Germany)](https://physik.uni-paderborn.de/silberhorn/)  
  "Integrated Quantum Optics"
* [Varun Verma (NIST, USA)](https://www.nist.gov/pml/applied-physics-division/faint-photonics)  
  "Progress in single photon imaging from the UV to the mid infrared using superconducting nanowire detectors"
* [Ian Walmsley (University of Oxford, UK)](https://www2.physics.ox.ac.uk/contacts/people/walmsley)  
  tba
* [Ronald Walsworth (Harvard University, USA)](http://walsworth.physics.harvard.edu/)  
  "Nanoscale magnetic imaging using quantum defects in diamond"

***Excerpt of topics***

* Single-photon detectors and sources
* Quantum metrology and sensing
* Quantum correlations and entanglement
* Quantum information processing, communication and QKD
* Integrated photonic quantum circuits

**About PicoQuant**

PicoQuant is a leading research and development company specializing in optoelectronics, which was founded in 1996. The company, based in the science and technology park of Berlin-Adlershof, Germany, is a worldwide leader in the field of single photon counting applications. The product portfolio encompasses picosecond pulsed diode lasers and LEDs, photon counting instrumentation, fluorescence lifetime spectrometers, FLIM and FCS upgrade kits for laser scanning microscopes as well as time-resolved confocal and super-resolution microscopes. Since April 2008 Sales and Support in North America is handled by PicoQuant Photonics North America Inc. The PicoQuant group employs currently around 80 people.

**Attachment**

Picture of a poster session during a PicoQuant symposium



Caption: Researchers from all over the world will meet on PicoQuant’s first quantum symposium in Berlin to present and discuss recent developments in single photon based quantum technology.

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