

Preliminary list of invited speakers

Detector issues

Angelo Gulinatti, Politecnico di Milano: *"New Silicon SPAD technology for enhanced red-sensitivity, high-resolution timing and system integration"*

Sae Woo Nam, NIST: *"Optical and near-infrared photon detection with superconducting devices"*

Andrew Shields / Oliver Thomas, Toshiba: *"Resolving the Photon Number with fast-gated Silicon Avalanche Photodiode"*

Source issues

Joel Bleuse, CEA, INAC, Grenoble: *"Quantum Dots in Tapered Photonic Wires: towards Unit-Efficiency Single-Photon Sources"*

Stephan Goetzinger, ETH Zürich: *"Planar dielectric antennas for collecting photons from a single emitter with near unity efficiency"*

John Rarity, University of Bristol: *"Progress in single photon sources, heralded versus true single photons"*

Jörg Wrachtrup, University Stuttgart: *"Interfacing diamond defects"*

Photon manipulation

Hugo Zbinden, University of Geneva: *"What are Single Photons good for?"*

Metrology

Brian Smith, Clarendon Laboratory, University of Oxford: *"Quantum-enhanced metrology in the real world: Losses, decoherence, and noise make life on the quantum edge challenging"*

Application

William H. Farr, JPL, CalTech: *"Single Photon Detectors for Capacity Achieving Optical Communication"*

Don Figer, Rochester Imaging Detector Laboratory: *"Single Photon Detectors for Inner and Outer Space"*

Entanglement / Theory

Paul Kwiat, University of Illinois at Urbana-Champaign: *"Optimized (Non)Entanglement: Designer Sources for Next-Generation Quantum Information"*

Special session

Alan Migdall, NIST: *"Single-Photon Tools, Techniques, and Prospects for Metrology"*

Maria Luisa Rastello, INRIM: *"Metrology Towards Quantum-Based Photon Standards"*