

Monday 21 October 2019	
08:00	Registration opening
09:00	Welcome
09:10	Session 1 - Sources I S. Reitzenstein - Deterministically fabricated quantum dot - waveguide systems for on-chip quantum optics
	F. Grafitti - Direct generation of tailored ultrafast entanglement
	S. Haffouz - InAsP quantum dot nanowires for telecom single photon emission
	T. Mueller - Quantum teleportation using highly coherent emission from telecom C-band quantum dots
10:40	Coffee break
11:10	Session 2 - Applications I E. Diamanti - Demonstrating quantum advantage with practical photonic systems
	K. Wei - Experimental Quantum Switching for Exponentially Superior Quantum Communication Complexity
	D. Cozzolino - Hybrid entanglement distribution through an air-core fiber
	C. Vigilar - High-Dimensional Chip-to-Chip Entanglement Distribution through Multicore Fibres
	A. Arvanitaki - Nanowire Detection of Photons from the Dark Side
13:00	Platinum sponsor presentation
13:05	Lunch
14:20	Session 3 - Detectors I E. Charbon - Massively parallel, three-dimensional photon counting: a versatile tool for quantum experimentalists and consumers
	E. Conca - Wide-area fast-gated single-photon detector with integrated TDC for near-infrared spectroscopy applications
	F. Acerbi - Silicon photomultipliers optimized for cryogenic temperatures
	S. Grosse - Single-Photon Detectors based on CSPAD technology
15:50	Coffee break
16:20	Session 4 - Metrology I F. Paolantini - New Frontiers in Quantum Measurement: Protective Measurement, Genetic Quantum Measurement and Robust Weak Measurement
	L. Shalm - Certified Randomness Expansion using a Loophole-Free Bell Test
	C. Chumchal - Investigations towards transmitting time and QKD signals over the same optical fiber
	M. Lasota - Reliable estimation of the statistics of photons emitted from an unknown source of light
17:40	Transfer to Leonardo campus
18:30	Welcome reception @ Leonardo campus
20:30	End

Tuesday 22 October 2019	
09:00	Historical perspective by Sergio Cova
09:15	Session 5 - Detectors II A. Korzh - Advances in superconducting nanowire single photon detectors and related applications
	V. Verma - Kilopixel arrays of superconducting nanowire single-photon detectors
	D.H. Smith - Multiplexed Superconducting Nanowire Single-Photon Detectors on UV-Written Silica Waveguides
	A. Gaggero - SNSPD readout using the amplitude multiplexing approach
10:45	Coffee break
11:15	Session 6 - Metrology II S. Polyakov - First quantum-measurement-inspired, scalable communication protocol and its experimental demonstration
	S. Schwarz - Reconstructing ultrafast energy-time entangled two-photon pulses
	D. Fuster - Development of a plug&play single photon source using electro-optical pumping schemes
	H. Olivier - Quantum dot based single-photon sources: performance reproducibility
12:35	Platinum sponsor presentation
12:40	Lunch
13:55	Session 7 - Applications II M. Lucamarini - Measurement Device Independent Quantum Cryptography
	M. Minder - Experimental quantum key distribution beyond the repeaterless secret key capacity
	M. Avesani - Practical Source-Device-Independent Quantum random number generators
	S. Wengerowsky - Entanglement distribution via a submarine fiber in the Mediterranean
	S. Wengerowsky - An entanglement based wavelength-multiplexed Quantum Communication Network
15:45	Platinum sponsor presentation
15:50	Coffee break
16:20	Session 8 - Applications III K. Suhling - Time-correlated single photon counting wide-field Fluorescence Lifetime Imaging Microscopy
	G. Tortarolo - Towards Single-Photon Microscopy: Exploiting Extra Spatio-Temporal Information Provided by SPAD Array Detectors in Laser Scanning Microscopy
	D. Tabakaev - Entangled two-photon absorption and the quantum advantage in sensing
	A. Ingle - Towards General-Purpose Passive Imaging with Single-Photon Sensors
	A. White - Realtime photon number resolution & imaging via photon counting
18:10	Poster session I
19:30	End

Wednesday 23 October 2019	
09:00	Session 9 - Applications IV J. Matthews - Homodyne Detectors on-chip for large scale silicon quantum photonics
	F. Ciccarilli - Low-power reconfigurable photonic integrated circuits fabricated by femtosecond laser micromachining
	P. Connolly - Multiplexed single-photon imaging using high efficiency plasmonic metasurface filters
	S. Olivier - Towards an integrated quantum photonics platform on silicon for secured communications
	J. Renema - Imperfect Gaussian Boson Sampling is Classically Simulable
10:50	Coffee break
11:20	Session 10 - Metrology III I. Degiovanni - Light sources characterization and optical modes reconstruction
	Y.-L. Mao - Error-Disturbance Trade-off in Sequential Quantum Measurements
	A. Paterova - Infrared metrology with visible light
	K. Laho - Characterizing heralded single photons from a Bragg-reflection waveguide loss-tolerant via moment generating function
12:50	Platinum sponsor presentation
12:55	Lunch
14:10	Session 11 - Detectors III B. Aull - Large-Format Image Sensors Based on Integration of Custom Geiger-Mode Avalanche Photodiode Arrays with All-Digital CMOS Circuits
	C.-Y. Park - Room temperature operation of InP/InGaAs single photon avalanche diode
	S. Butler - Planar Geometry Ge-on-S Single-Photon Avalanche Diode Detectors for the Short-Wave Infrared
	S. Accorcia - Fully integrated electronics for high-performance and high-speed acquisition with Single Photon Avalanche Diodes
	M. Salomoni - Future perspective of SiPM technology
16:00	Coffee break
16:30	Session 12 - Sources II C.A. Solares - Scalable interfacing of quantum photonic platforms: solid state single-photon sources and reconfigurable photonic circuits
	T. Heindel - Single-Photon QKD using Engineered Solid State Quantum-Light Sources
	S.D. Thernij - Electrical control of Nitrogen - Vacancy centers in diamond
	S. Ecker - Overcoming noise in entanglement distribution through high-dimensional encoding
17:50	Transfer to Castello Sforzesco
18:30	Guided tours of Castello Sforzesco
20:00	Dinner at Castello Sforzesco
23:00	End

Thursday 24 October 2019	
09:00	Session 13 - Sources III C. Toninelli - Single-molecule based single-photon sources
	R. Schofield - Nanophotonic waveguide coupling to organic molecules in micro-capillaries
	H. Abudayyeh - Quantum light manipulation: A path towards efficient pure room-temperature single-photon sources
	H. Wang - Single photons for quantum technologies
	C. P. Luudt - High-Efficiency Time-Multiplexed Single-Photon Source
10:50	Coffee break
11:20	Session 14 - Applications V K. Srinivasan - Quantum source and frequency conversion technologies based on integrated nanophotonics
	J. Adcock - Programmable multiphoton graph states on a silicon chip
	G. Kavuri - Towards a loophole-free Bell experiment on a tabletop
12:50	Platinum sponsor presentation
12:55	Lunch
14:10	Session 15 - Detectors IV S. W. Nam - From dark matter detection to artificial intelligence: applications of superconducting nanowire single photon detectors
	M. Perrenoud - High detection rate and high efficiency with parallel SNSPDs
	S. Buckley - Progress in superconducting optoelectronic networks for neuromorphic computing
	T. Takumi - Time-resolved measurement of a single-photon wave packet with an optical Kerr effect
	E. Fossom - Quanta Image Sensor Progress Review
16:00	Coffee break
16:30	Session 16 - Applications VI S. Verghese - Self-driving cars and lidar
	G. Musarra - Single-photon, single-pixel intelligent Lidar
	A. Maccherone - Three dimensional imaging of dynamic underwater scenes using single photon detection
	R. Tobin - Depth imaging through obscuration using single photon detection in the short-wave infrared
	M. Laurents - Computational imaging with SPADs at SWIR wavelengths
18:20	Poster session II
19:40	End

Friday 25 October 2019	
09:00	Session 17 - Detectors V J. Rothman - Reaching for GHz single-photon detection rates with HgCdTe APD detectors
	L. Gasparini - CMOS-SPAD arrays for Quantum Imaging Applications
	M. Zarghami - A Novel Approach to High Dynamic Range Imaging with CMOS-SPADs
	G. Jegannathan - Current-assisted single-photon avalanche diode (CASPAD) in 350 nm CMOS
	D. Starkey - Room Temperature Photon-number-resolving Color Imaging without Avalanche Gain
10:50	Coffee break
11:20	Session 18 - Sources IV P. Michler - Quantum dots at telecom wavelengths for single- and entangled photon sources
	S. Francesconi - Engineering two-photon wavefunction and exchange statistics in a semiconductor chip
	G. Solomon - Filter-free single-photon emission in an integrated cavity-waveguide device
	C. Marvinney - Toward control of the quantum state of HEM single-photon emitters
	J. Grim - Three-Quantum-Dot Superradiance in a Photonic Crystal Waveguide Enabled by Scalable Strain Tuning
13:10	Lunch
14:15	Session 19 - Applications VII D. Zhang - Single-photon technology in Long Distance Quantum Communication
	Z.-Q. Li - Experimental quantum repeater without quantum memory
	A. Schemmich - Hong-Ou-Mandel interference of polarization qubits stored in independent room-temperature quantum memories
	S. Grandi - Towards long distance entanglement between a photon and a solid-state quantum memory
	M. F. Adasani - Entanglement and non-locality between disparate solid-state quantum memories mediated by photons
16:05	Concluding remarks
16:15	Farewell coffee
16:45	End

Notes:  
 Bold = invited talk, 30 min  
 Regular = contributed talk, 20 min