

Monday, July 1st

Session 1:		Chair Jaromír Fiurášek
9:00	Registration	
9:30	Jaromír Fiurášek	Opening word
10:00	● Stefano Olivares	Beating the standard quantum limit for binary phase-shift-keying discrimination with a realistic hybrid feed-forward receiver
10:15	● Marcin Koźbiał	New perspectives on alignment-based atomic magnetometry
10:30		Coffee break

Session 2:		Chair Jan Kolodynski
11:00	● Maria Chekhova	Spontaneous parametric down-conversion in a liquid crystal
11:30	● Gabriel Araneda	Distributed Quantum Computing between Two Ion-Trap Nodes in a Quantum Network
12:00	● Muñoz de las Heras	Photonic quantum metrology with variational quantum optical non-linearities
12:15	● Kim, Dong-Hyun	Implementation of distributed quantum phase estimation with fewer photons than number of phases
12:30		Lunch

Session 3:		Chair Nicolas Treps
14:00	● Roman Schnabel	Creating Ensemble Data from Measurements on another Ensemble
14:30	● Jan Kolodynski	Quantum sensors operated in real time
15:00	● Marcin Jarzyna	Continuous-variable quantum key distribution over multispan amplified links
15:15	● Nathan Walk	Advantage of multi-partite entanglement for quantum cryptography over long and short ranged networks
15:30		Coffee break

Session 4:		Chair Gabriel Araneda
16:00	● Gershon Kurizki	Quantum Nonlinear Thermodynamics: Thermal Noise as Quantum Resource
16:30	● Yong Siah Teo	Evidence-based certification of quantum systems with relative belief
16:45	● Alessia Allevi	Experimental qualification of a homodyne-like receiver for quantum-key-distribution protocols
17:00	● Vincenzo D'Ambrosio	Engineering quantum states from a spatially structured quantum eraser
17:15	● Niels Böttner	Coherent feedback and internal squeezing in cavity-enhanced detectors

Tuesday, July 2nd

Session 1: Chair Roman Schnabel

- 9:00 ● Jonathan Home Realising bosonic codes with trapped ions
- 9:30 ● Arno Rauschenbeutel Correlating photons using the collective nonlinear response of atoms weakly coupled to an optical mode
- 10:00 ● Lukáš Slodička Coherence and statistics of light from large trapped-ion crystals
- 10:15 ● Diana Chisholm Non-Gaussian states in levitated nanoparticles to witness gravity-induced entanglement
- 10:30 Coffee break
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Session 2: Chair Jonathan Home

- 11:00 ● Robin Kaiser With dipole-dipole interactions towards Anderson localisation
- 11:30 ● Tom Bienaimé Manipulation of qudits encoded in Rydberg blockaded arrays of single atoms
- 12:00 ● Cristian Tabares A variational toolbox for analog quantum simulators
- 12:15 ● Michal Sedlák Storage and retrieval of quantum operations – an experimental test
- 12:30 Lunch
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Session 3: Chair Robin Kaiser

- 14:00 ● Kihwan Kim Toward quantum advantage with trapped ions
- 14:30 ● Romain Bachelard Abnormal two-photon correlations in the interference of the light emitted by many independent atoms
- 15:00 ● Alessandro Laneve Wavevector-polarization correlation in entangled photons from radiative cascades
- 15:15 ● Maryam Khanahmadi On-demand generation of propagating bosonic states from Superconducting circuits
- 15:30 Coffee break
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Session 4:

- 16:00 ● Poster session 1
- 18:00

Wednesday, July 3rd

Session 1:		Chair Radim Filip
9:00	● Akira Furusawa	Optical quantum computers with quantum teleportation
9:30	● Markus Hennrich	TBD
10:00	● Changhun Oh	Classical algorithm for simulating experimental Gaussian boson sampling
10:15	● Mahmoud Kalash	Optical parametric amplification for the detection of quantum states
10:30		Coffee break

Session 2:		Chair Akira Furusawa
11:00	● Ulrik L. Andersen	Measurement-induced beam splitter networks
11:30	● Nicolas Treps	Optimal parameters estimation in optics and the example of source separation
12:00	● Young-Sik Ra	Experimental generation of three-dimensional cluster entangled state
12:15	● Jiří Fadrný	Experimental preparation of multiphoton-added coherent states of light
12:30		Lunch

Session 3:		Chair Ana Predojevic
14:00	● Nicolas Cerf	From continuous-variable entropies to majorization relations in bosonic or fermionic phase space
14:30	● Uros Delic	Non-Hermitian collective optomechanical effects in nanoparticle tweezer arrays
15:00	● Niklas Budinger	The Octo-Rail lattice: a four-dimensional cluster state design
15:15	● Maria Bondani	Comprehensive analysis and quantum tomography of Silicon Photomultiplier Detectors for quantum technologies
15:30		Coffee break

Session 4:		Chair Nicolas Cerf
16:00	● Alexander Lvovsky	Tsang's superresolution method in application to imaging
16:30	● Cameron Calcluth	Sufficient condition for universal quantum computation using bosonic circuits
17:00	● Jarek Korbicz	Purifying Teleportation
17:15	● Luis Villegas-Aguilar	Photonic quantum networks reveal the nonlocal nature of noisy entangled states
17:30	● Alessandro Zecchetto	Generation of spatial entanglement in semiconductor nonlinear waveguide arrays

Thursday, July 4th

Session 1: Chair Gediminas Juzeliūnas

- 9:00 ● Maurizio Verde Spin-selective coherent light scattering from ion crystals
- 9:30 ● Ana Predojevic Quantum dot sources: efficiency, entanglement, and correlations
- 10:00 ● Philipp Schneeweiss Superradiant bursts of light from cascaded quantum emitters: Experiment on photon-photon correlations
- 10:15 ● Helen Chrzanowski Hong-Ou-Mandel interference between two photons of different colours
- 10:30 Coffee break
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Session 2: Chair Matteo Paris

- 11:00 ● Alexei Ourjoumtsev Quantum engineering of light with intracavity Rydberg superatoms
- 11:30 ● Philipp Schindler 2D trapped ion quantum information processing
- 12:00 ● Bence Gábor Observation of vacuum Rabi splitting of a subradiant atom-cavity system
- 12:15 ● Giovanni Ferioli Non-Gaussian Correlation in the steady state of a superradiant cloud
- 12:30 Lunch
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Session 3: Chair Alexei Ourjoumtsev

- 14:00 ● Gediminas Juzeliūnas Spin Squeezing for Ultracold Atoms in Optical Lattices
- 14:30 ● Matteo Paris Frequency estimation by frequency boost
- 15:00 ● Darren Moore Nonlinear Squeezing in Classical and Quantum Mechanics
- 15:15 ● Jan Peřina Multiple quantum exceptional, diabolical, and hybrid points in multimode bosonic systems
- 15:30 Coffee break
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Session 4:

- 16:00 ● Poster session 1
- 18:00

Friday, July 5th

Session 1:

Chair Petr Marek

- 9:00 ● Konrad Banaszek Back from deep space: quantum-enhanced communication with extremely weak optical signals
- 9:30 ● David Nadlinger Photon-mediated entanglement in a mixed-species ion trap network
- 10:00 ● Tomáš Opatrný Work and heat exchange in quantum nonlinear interferometers
- 10:15 ● Daniele Morrone Daemonic ergotropy in continuously monitored open quantum batteries
- 10:30 Coffee break
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Session 2:

Chair Konrad Banaszek

- 11:00 ● Christoph Marquardt Quantum communication from space and on ground
- 11:30 ● Pradip Laha The tripartite multiphoton Jaynes-Cummings model: bosonic entanglement, spin coherence, and Wigner nonclassicalities
- 12:00 ● Luca Innocenti Quantum extreme learning machines and online quantum reservoir computing via shadow tomography
- 12:15 ● Ievgen Arkhipov Implementing a programmable symmetric-asymmetric state switch in time-modulated non-Hermitian systems
- 12:30 Lunch
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