



# Joint Annual Meeting of SPS and ÖPG 2019

## Tuesday 27 August 2019

### Quantum Science and Technology: I - G 60 (14:00 - 16:30)

time	[id] title	presenter
14:00	[345] □501□Introduction to QSIT Session	Prof. ENSSLIN, Klaus
14:15	[346] □502□Scaling elements for ion trap quantum processors	Prof. HOME, Jonathan
14:45	[314] □503□Linking trapped-ion quantum nodes	NORTHUP, Tracy
15:15	[137] □504□Digital Quantum Simulation, Trotter Errors, and Quantum Chaos of the Kicked Top	SIEBERER, Lukas
15:30	[238] □508□Entanglement transfer using local operations	Dr NEVEN, Antoine
15:45	[312] □506□Experimental secure quantum computing with only classical clients	Mr VYVLECKA, Michal
16:00	[195] □507□Quantum Communication: From Random Numbers To Teleportation	THEW, Rob

### Quantum Science and Technology: II - G 60 (17:00 - 19:00)

time	[id] title	presenter
17:00	[294] □511□A Broadband Rb Vapor Cell Quantum Memory for Single Photons	BUSER, Gianni
17:15	[200] □512□Sub-second optical storage using dynamical decoupling in an atomic frequency comb memory	Mr HOLZÄPFEL, Adrian
17:30	[347] □513□Ultra coherent nanomechanical oscillators	Prof. KIPPENBERG, Tobias
18:00	[348] □514□Quantum Simulation with Ultracold Dipolar Atoms	Dr FERLAINO, Francesca
18:30	[138] □515□Scattering from the dark and birefringent modes: new self-organisation phases	Dr DREON, Davide
18:45	[201] □516□Local spin manipulation of quantized atomic currents	Dr CORMAN, Laura

## Wednesday 28 August 2019

### Quantum Science and Technology: III - G 60 (14:00 - 16:30)

time	[id] title	presenter
14:00	[349] □521□Quantum Information Science with Superconducting Circuits	Prof. WALLRAFF, Andreas
14:30	[182] □522□Gate-efficient simulation of molecular eigenstates on a quantum computer	Dr GANZHORN, Marc
14:45	[13] □523□Interacting TLS as sources of noise and fluctuations in superconducting circuits	Dr MÜLLER, Clemens
15:00	[193] □524□Transduction and entanglement generation with silicon nanobeam oscillators	FINK, Johannes
15:30	[178] □525□Experimental Realization of Microwave Quantum Illumination	Dr BARZANJEH, Shabir
15:45	[313] □526□Double Quantum Dots in an Undoped Germanium Heterostructure	Dr HOFMANN, Andrea
16:00	[350] □527□Coupling spins coherently to microwave photons	Prof. IHN, Thomas

### Quantum Science and Technology: IV - G 60 (17:00 - 19:00)

time	[id] title	presenter
17:00	[49] □531□Shot-noise of high-impedance quantum devices using impedance matching	Prof. SCHÖNENBERGER, Christian
17:15	[177] □532□Electron-polariton interactions in the fractional quantum Hall regime	Dr CHERVY, Thibault
17:30	[351] □533□All fermionic non-Gaussian states are magic states for matchgate computations	Prof. KRAUS, Barbara
18:00	[269] □534□The information theory of reference clocks	Dr SILVA, Ralph
18:15	[132] □535□Quantum interference of topological states of light	Prof. ZILBERBERG, Oded
18:30	[158] □536□Quantum Computing and Detection of Cancer	Dr HIESMAYR, Beatrix

# Friday 30 August 2019

## Quantum Science and Technology: V - G 60 (11:15 - 13:15)

time	[id] title	presenter
11:15	[194] 541 Progress in the quantum control of single molecules	Dr MEIR, Ziv
11:45	[164] 542 Atom Interferometry: Gravity, Blackbody Radiation and Dark Energy	Dr HASLINGER, Philipp
12:15	[5] 543 Long-Baseline Universal Matter-Wave Interferometry	Mr PEDALINO, Sebastian
12:30	[175] 544 Long-term stability analysis of a compact Ramsey-scheme vapor-cell atomic clock at $10^{-14}$ level	ALMAT, Nil
12:45	[204] 545 Towards spin-squeezing a solid	Dr KACZMAREK, Krzysztof T.
13:00	[12] 546 Cavity-Based 3D Cooling of a Levitated Nanoparticle via Coherent Scattering	Mr WINDEY, Dominik