Posters

Poster Session 1 / Monday, Jan. 11 / 15:45 – 17:00 h
(14 Posters)

# in session	*Name*	*Title*
P01	Ondrej Cernotik	**Microwave entanglement created using swap gates with biased noise**
P02	Ivari Pietikäinen	**Microwave swap gates with a Kerr-cat ancilla**
P03	*(cancelled at short notice)*	
P04	Max Werninghaus	**Optimal Control of Superconducting Qubits**
P05	Gaurav Bhole	**Rescaling Interactions for Quantum Control**
P06	*(cancelled at short notice)*	
P07	Tobias Hangleiter	**Filter Function Formalism for Quantum Operations**
P08	Ashish Mani	**Towards quantum evolutionary search and optimization on NISQ devices**
P09	Göran Wendin	**Benchmarking the Variational Quantum Eigensolver for Quantum Chemistry on High-Performance Computers**
P10	*(cancelled at short notice)*	
P11	Rebekka Garreis	**Charge detection in electrostatically defined quantum dots on bilayer graphene**
P12	Chuyao Tong	**Tunable Valley Splitting in Bilayer Graphene Quantum Dots**

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P13	Amin Hosseinkhani	**Theory of valley splitting and valley-induced relaxation of a single silicon spin qubit in the presence of interface disorder**
P14	Riccardo Borgani	**Adapting 5G-telecom hardware for the control of quantum computers**
P15	Seref Kalem	**Silicon quantum pillars for possible scalable HW platforms**
P16	Mats Tholén	**General-Purpose firmware for controlling quantum processors**
P17	Robert Gartmann	**Highly integrated RF electronics to interface superconducting qubits**

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Poster Session 2 / Tuesday, Jan. 12 / 15:45 – 17:00 h
(17 Posters)

# in session	*Name*	*Title*
P01	Daniel Jirovec	**A depletion mode hole spin-qubit in Ge**
P02	Theodor Lundberg	**Accurate Readout of Spin States in Silicon Nanowire Quantum Dots**
P03	Andras Palyi	**Charge noise and overdrive errors in reflectometry-based qubit readout**
P04	Adrien Morel	**Cryogenic current-steering DAC for biasing of quantum dots**
P05	Réouven Assouly	**Number-resolved photocounter for propagating microwave mode**
P06	Michael Renger	**Beyond the standard quantum limit of parametric amplification**
P07	Clemens Müller	**Quantum rifling - Protecting a qubit from measurement back action**
P08	Mikko Möttönen	**Radio frequency quantum-circuit refrigerator and the resulting photon-number-dependent Lamb shift**
P09	Jeremy Stevens	**Cavity-photon induced state transitions in a coupled Fluxonium quibt system**
P10	*(cancelled at short notice)*	
P11	Federico Roy	**Control, Calibration and Characterization of superconducting qubits**

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P12	Richard Gebauer	**Integrated scalable electronics platform to interface superconducting quibts**
P13	Oliver Sander	**Partitioning of functionality for superconducting qubit control and readout**
P14	Camille Chartrand	**A silicon-integrated telecommunications photon-spin interface**
P15	Albert Hertel	**Electrical properties of selective area grown superconductor-semiconductor hybrid structures on silicon**
P16	Matthias Rößler	**Top-down Topological Insulator Nanowires for Majorana-Qubits**
P17	Rubén Seoane Souto	**Optimal manipulation of Majorana bound states using quantum dots**
P18	Manohar Kumar	**Anyonic statistics in collider geometry**

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Poster Session 3 / Wednesday, Jan. 13 / 11:00 – 12:30 h
(17 Posters)

# in session	*Name*	*Title*
P01	Janine Hilder	**A shuttling-based trapped-ion quantum information processing node**
P02	Christian Melzer	**Control Software Stack for Shuttling-Based Trapped-Ion Quantum Computing**
P03	Daniel Wessel	**Components for scalable quantum logic with trapped ions**
P04	Matthias Mergenthaler	**Effects of surface treatments and packaging on transmon qubits**
P05	Uwe von Lüpke	**Flip chip technique for hybrid quantum systems**
P06	Martin Weides	**Coherent superconducting qubits from a subtractive junction fabrication process**
P07	Benedikt Kratochwil	**The CQ3 Qubit spectroscopy and coherence**
P08	Jacob Koenig	**Selectively Activated Photon-Hopping, Cross-Kerr, and Two-Mode Squeezing via Flux Modulation of a Tunable C**
P09	Benjamin Schiffer	**Faster adiabatic ground state preparation with few measurements**
P10	Nicolas Wittler	**An integrated tool-set for Control, Calibration and Characterization of quantum devices applied to superconducting qubits**

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P11	Xiaosong Ma	**An integrated heterogeneous superconducting-silicon-photonic platform for quantum network**
P12	Hugo Doeleman + Tom Schatteburg	**Towards quantum optomechanics using bulk acoustic wave resonators**
P13	Tomas Ramos	**Scalable multiphonon generation from cavity-synchronized single-photon sources**
P14	Rene Otten	**Scalable Cryogenic Control of Spin quibts**
P15	Florian Ginzel	**Spin Shuttling in a Silicon Double Quantum Dot**
P16	Cécile Yu	**High-Impedance NbN Microwave Resonator as a Quantum Bus for Si Hole Spin Qubits**
P17	Jann Hinnerk Ungerer	**Engineering of a semiconductor charge qubit coupled to a resonator – From coherence protection to ultrastrong coupling**