

BSCC		COMPUTING		COMMUNICATION		SENSING		SIMULATION	
<p>Tuesday - 14:00-15:45 BSCC - 1 (Platine)</p> <p>1 Programmable Atomic Large-Scale Quantum Simulation (Project PASQUANS) - Andrew Daley</p> <p>2 Optical Backaction Evading Measurement of a Mechanical Oscillator - Shomroni Itay</p> <p>3 Entanglement preserving local thermalization - Hsieh Chung-Yun</p> <p>4 Preparation and detection of a phonon Fock states at room temperature - Tarrago Velez Santiago</p> <p>5 Electron quantum optics and quantum signal processing - Pegiovanni Pascal</p> <p>6 Minimal Excitations in the Fractional Quantum Hall Regime - Rech Jérôme</p> <p>7 Zero-field magnetometry based on nitrogen-vacancy ensembles in diamond - Wickenbrock Arne</p>		<p>Tuesday - 14:00-15:45 Computing - 1 (Auditorium)</p> <p>1 A linear Paul trap for catching, sympathetic cooling, identifying and shooting out ions: Applications in quantum information - Ferdinand Schmid-Kaler</p> <p>2 A Shuttling-Based Trapped-Ion Quantum Processing Node - Poschinger Ulrich</p> <p>3 Non-Abelian adiabatic geometric transformations in a cold Strontium gas - Wilkowski David</p> <p>4 Quantum Information Processing using Trapped Atomic Ions and MAGIC - Wunderlich Christof</p> <p>5 Gate-efficient simulation of molecular eigenstates on a quantum computer - Ganzhorn Marc</p> <p>6 The materials science of Josephson junctions: modelling their formation and electrical response from an atomistic point of view - Jared Cole</p> <p>7 Advanced quantum computing with trapped ions (Project AqIon) - Thomas Monz - Universität Innsbruck, Austria</p>		<p>Tuesday - 14:00-15:45</p>		<p>Tuesday - 14:00-15:45</p>		<p>Tuesday - 14:00-15:45 Simulation - 1 (Titane)</p> <p>1 OTOCs and SPT invariants from statistical correlations of randomized measurements - Andreas Elben</p> <p>2 Coherence effects in Atomtronics circuits - Luigi Amico</p> <p>3 Hypersonic matter wave guiding for atom interferometry - Wolf Von Klitzing</p> <p>4 Exciton and charge transport via cavity-mediated long-range interactions - Guido Pupillo</p> <p>5 Quantum Frequency Comb for Quantum Complex Networks - Valentina Parigi</p> <p>6 Sample complexity of device-independently certified "quantum supremacy" - Kliesch Martin</p> <p>7 Probing the influence of many-body fluctuations on Cooper pair tunneling using circuit QED - Leger Sebastien</p>	
<p>Wednesday - 14:00-16:00 BSCC - 2 (Platine)</p> <p>8 New single photon emitters in diamond based on group IV impurities - Ditaila Tcherhaj Sviatoslav</p> <p>9 Deterministic Creation and Spins in Quantum Emitters in Atomically Thin Semiconductors - Montblanch Alejandro</p> <p>10 Nanomaterials with optically addressable spins for quantum technologies - Goldner Philippe</p> <p>11 Two-dimensional quantum materials and devices for scalable integrated photonic circuits (Project 2DSIPIC) - Dmitri Efetov</p> <p>12 Scalable Two-Dimensional Quantum Integrated Photonics (Project S2QUIP) - Klaus Jöns</p> <p>13 Scalable Rare Earth Ion Quantum Computing Nodes (Project SQUARE) - Hunger David</p> <p>14 Optical nanofibre mediated light interactions with cold Rb atoms - Nic Chormaic Síle</p> <p>15 Microwave driven ion trap quantum computing (Project MicroQC) - Nikolay V. Vitanov</p>		<p>Wednesday - 14:00-16:00 Computing - 2 (Titane)</p> <p>8 F-count optimization of quantum circuits using graph-theoretical rewriting of ZX-diagrams - Van De Weetering John</p> <p>9 An Open Superconducting Quantum Computer (Project OpenSuperQ) - Frank Wilhelm-Mauch - Universität des Saarlandes, Germany</p> <p>10 Quantum Lattice Enumeration - Shen Yixian</p> <p>11 Application on LHC High Energy Physics data analysis with IBM Quantum Computing Guan Wen</p> <p>12 Training-parameterized quantum circuits - Theis Dirk</p> <p>13 Oliver</p> <p>14 Flight Gate Assignment with a Quantum Annealer - Stollenwerk Tobias</p> <p>15 Quantum Annealing Tabu Search - Pastorello Davide</p> <p>16 Quantum circuits with quantum control of causal orders - Branciard Cyril</p>		<p>Wednesday - 14:00-16:00 Communication - 1 (Auditorium)</p> <p>Quantum Internet Alliance (Project QIA) - Stephanie Wehner</p> <p>1 Affordable Quantum Communication for Everyone: Revolutionizing the Quantum Ecosystem from Fabrication to Application (Project UNICORN) - Hannes Hübel</p> <p>2 Quantum Storage of Frequency-Multiplexed Heralded Single Photons - Dario Lago-Rivera</p> <p>3 Towards broadband optical spin-wave quantum memory - Alexey Tiranov</p> <p>4 A Broadband Rb Vapor Cell Quantum Memory for Single Photons - Gianli Buser</p> <p>5 Diamond Qubits in Nanocavity Spin-Photon Interfaces for Quantum Communication - Tim Schröder</p> <p>6 Quantum Teleportation and Entanglement Swapping with Photons from a Quantum Dot - Klaus Jöns</p> <p>7</p> <p>8</p>		<p>Wednesday - 14:00-16:00</p>		<p>Wednesday - 14:00-16:00 Simulation - 2 (Platine)</p> <p>8 Analogue randomized benchmarking for testing quantum simulation - Derbyshire Elen</p> <p>9 Quantum simulation and entanglement engineering in quantum cascade laser frequency combs (Project Combs) - Francesco Mirardi</p> <p>10 Experimental studies of spin dynamics in an atomic dipolar condensate - Olivier Gorceix</p> <p>11 Simulating Nagaoka Ferromagnetism in a 2D Quantum Dot Array - Mukhopadhyay Uditendu</p> <p>12 Controlling symmetry and localization with artificial gauge fields in disordered quantum systems - Chicreanu Radu</p> <p>13 Investigating many-body quantum phenomena with dipolar gases of erbium atoms - Lauriane Chomaz</p>	
<p>Thursday - 08:45-10:15</p>		<p>Thursday - 08:45-10:15</p>		<p>Thursday - 08:45-10:15 Communication - 2 (Auditorium)</p> <p>9 Building the UK Quantum Network - Joseph Pearce</p> <p>10 Continuous Variable Quantum Communications (Project CIVIQ) - Valerio Pruneri</p> <p>11 A novel, simple source of quantum microwaves: Josephson-photonics devices - Kubala Björn</p> <p>12 Quantum Random Number Generators: cheaper, faster and more secure (Project QRANGE) - Hugo Zbinden</p> <p>13 Feasibility demonstration of Space Quantum Communications with VEO orbits for critical infrastructures - Paolo Villorosi</p> <p>14 Supporting the commercialisation of quantum key distribution technology with Si-traceable measurements - Robert Kirkwood</p>		<p>Thursday - 08:45-10:15 Sensing - 1 (Titane)</p> <p>1 Quantum jump metrology - Almut Beige</p> <p>2 UK National Quantum Technology Hub in Sensors and Metrology - Yeshpal Singh</p> <p>3 Quantum sensors with matter waves: geodesy, navigation and general relativity - Philippe Bouyer</p> <p>4 Relaxation and Dephasing in Hot - Electron Quantum Optics Interferometry - Clark Lewis</p> <p>5 Single microwave photon detection by an underdamped Josephson junction - Oelsner Gregor</p> <p>6 Microwave field imaging with atomic vapor cells - Shi Yongqi</p>		<p>Thursday - 08:45-10:15 Simulation - 2 (Platine)</p> <p>8 Analogous randomized benchmarking for testing quantum simulation - Derbyshire Elen</p> <p>9 Quantum simulation and entanglement engineering in quantum cascade laser frequency combs (Project Combs) - Francesco Mirardi</p> <p>10 Experimental studies of spin dynamics in an atomic dipolar condensate - Olivier Gorceix</p> <p>11 Simulating Nagaoka Ferromagnetism in a 2D Quantum Dot Array - Mukhopadhyay Uditendu</p> <p>12 Controlling symmetry and localization with artificial gauge fields in disordered quantum systems - Chicreanu Radu</p> <p>13 Investigating many-body quantum phenomena with dipolar gases of erbium atoms - Lauriane Chomaz</p>	
<p>Thursday - 10:45-12:15 BSCC - 3 (Auditorium)</p> <p>16 Temporal mode selective measurement and purification of quantum light - Ansarí Valiú</p> <p>17 Electric-field control of CMOS silicon spin qubits - Niquet Yann-Michel</p> <p>18 Superconducting Josephson junctions in Si and Ge based scalable technology - Leffoch François</p> <p>19 Cooper pair splitting, thermoelectricity, and quantum heat engine in graphene NSN system - Hakonen Pertti</p> <p>20 Quantum metamaterials composed of superconducting flux qubits - Il'ichev Evgenii</p> <p>21 Technology and Engineering for Quantum Technologies - Radu Iuliana</p>		<p>Thursday - 10:45-12:15</p>		<p>Thursday - 10:45-12:15 Communication 3 (Titane)</p> <p>15 Security and implementation of practical unforgeable quantum money - Mattiau Bozzio</p> <p>16 Classical delegation of secret qubits and Applications in quantum protocols - Alexandru Cojocaru</p> <p>17 Quantum random number generation with partially characterised devices based on bounded energy - Davide Rusca</p> <p>18 Anonymity for practical quantum networks - Anupama Unnikrishnan</p> <p>19 Heralded entanglement in quantum communication networks - Rob Thew</p> <p>20 Nanobob: Quantum Secure Communication with a CubeSat - Erik Kerstel</p>		<p>Thursday - 10:45-12:15 Sensing - 2 (Platine)</p> <p>7 Spin squeezing in a trapped atom clock and waveguide design for on-chip atom interferometry - Garrido Alzar Carlos L.</p> <p>8 Leveraging room temperature diamond quantum dynamics to enable safe, first-of-its-kind, multimodal cardiac imaging (Project MetabolIQ) - Ilai Schwartz</p> <p>9 Quantum Absolute Sensors for Gravity measurements - Merlet Sébastien</p> <p>10 Advancing Science and Technology Through diamond Quantum Sensing (Project ASTERIQS) - Thierry Debusschert</p> <p>11 Using polarons for sub-nk quantum non-demolition thermometry in a Bose-Einstein condensate - Mehboudi Mohammad</p> <p>12 Integrated Quantum Clock (Project IQClock) - Yeshpal Singh</p>		<p>Thursday - 10:45-12:15 Simulation - 2 (Platine)</p> <p>8 Analogous randomized benchmarking for testing quantum simulation - Derbyshire Elen</p> <p>9 Quantum simulation and entanglement engineering in quantum cascade laser frequency combs (Project Combs) - Francesco Mirardi</p> <p>10 Experimental studies of spin dynamics in an atomic dipolar condensate - Olivier Gorceix</p> <p>11 Simulating Nagaoka Ferromagnetism in a 2D Quantum Dot Array - Mukhopadhyay Uditendu</p> <p>12 Controlling symmetry and localization with artificial gauge fields in disordered quantum systems - Chicreanu Radu</p> <p>13 Investigating many-body quantum phenomena with dipolar gases of erbium atoms - Lauriane Chomaz</p>	
<p>Friday - 8:45-10:30 BSCC - 4 (Platine)</p> <p>22 Quantum Microwave Communication and Sensing (Project QMICS) - Mikko Möttönen</p> <p>23 Microwave remote state preparation vs. quantum cryptography - Depepe Frank</p> <p>24 Photons for Quantum Simulation (Project PhoQus) - Alberto Bramati - Sorbonne Université, France</p> <p>25 Hong-Ou-Mandel effect under partial time reversal: an interference effect due to time-like indistinguishability in the amplification of light - Ceri Nicolas</p> <p>26 Sub-Poissonian Photon Gun by Coherent Diffusive Photonics (Project PhoG) - Natalia Korolkova</p> <p>27 The commercial case for QKD: an analysis of use cases and implications for the performance of the underlying technology - Ryan Parker</p> <p>28 D-dimensional frequency-time entangled cluster states with on-chip/fiber-based photonic systems - Kues Michael</p>		<p>Friday - 8:45-10:30 Computing - 3 (Auditorium)</p> <p>16 Single shot high fidelity QND qubit readout using a transmon molecule in a 3D cavity - Remy Dassonneville</p> <p>17 Strong Microwave Photon Coupling to the Quadrupole Moment of an Electron in Solid State - Kesli Jorje</p> <p>18 Gate-Based High Fidelity Spin Readout in a CMOS Device - Niegemann David</p> <p>19 Circuit quantum electrodynamics with silicon spin qubits - Benito Monica</p> <p>20 Gate-based readout for silicon spin qubits: Optimization and Scaling Lisa Ibberson</p> <p>21 Long-range spin entanglement in semiconductor quantum circuits - Jadot Baptiste</p> <p>22 Coherent displacement of individual electron spins in a two-dimensional array of tunnel coupled quantum dots - Mortemousque Pierre-André</p>		<p>Friday - 8:45-10:30</p>		<p>Friday - 8:45-10:30 Sensing - 3 (Titane)</p> <p>13 Noise-immune cavity-assisted non-destructive detection for an optical lattice clock in the quantum regime - Lodewyck Jérôme</p> <p>14 Quantum enhanced optical measurements with twin-beams: from absorption estimation to ghost microscopy - Losero Elena</p> <p>15 Time-continuous measurements for advanced quantum metrology - Genoni Marco G.</p> <p>16 Towards a quantum-enhanced trapped-atom clock on a chip - Reichel Jakob (2)</p> <p>17 Overcoming resolution limits with quantum sensing - Gefen Tuvia</p> <p>18 Miniature Atomic vapor-Cells Quantum devices for Sensing and Metrology Applications (Project MACQSIMAL) - Jacques Haesler</p> <p>19 Beam shaping and control in an optical fibre based atom interferometer - Faries Mark</p>		<p>Friday - 8:45-10:30</p>	