


Paris time	Wednesday the 3rd of November 2021	Thursday the 4th of November 2021	Friday the 5th of November 2021
08:30	Welcome - P. Degiovanni & A. Dréau		
09:00	Tutorial - FQA - M. Huber (TU Vienna, AT): <i>The thermodynamics of measuring time</i>	QCOM - Y. Pelet (Univ. Côte d'Azur, CNRS, FR): <i>Operational entanglement-based real-field quantum key distribution</i>	Tutorial - QPAC - I. Kerenidis (CNRS, Univ. Paris, FR): <i>Quantum machine learning</i>
09:30		QCOM - J. Vaneecloo (CNRS, Collège de Fr., PSL Univ., FR): <i>A Rydberg superatom for cavity QED applications: coherent control, single-shot detection and state-dependent optical π phase shift</i>	
10:00	Invited talk - FQA - H. Wiseman (Griffith Univ., AU): <i>Can a qubit be your friend? Why experimental metaphysics needs a quantum computer</i>	QCOM - F. Kaiser (Univ. Stuttgart, D): <i>Integrated nanophotonic multi-spin-photon interface based on silicon vacancies in silicon carbide</i>	QPAC - A. Shayeghi (Univ. Lyon, ENS Lyon, CNRS, Inria, FR): <i>A lower bound on the space overhead of fault-tolerant quantum computation</i>
10:30	Coffee break	Coffee break	Coffee break
11:00	FQA - A. Feller (Univ. Lille, CNRS, Centrale Lille, FR): <i>Emergence of a classical objective reality from a quantum observer network</i>	QMET - L. Garbe (TU Wien, AT): <i>Universal scaling laws for critical quantum sensing</i>	Tutorial - QPAC - M. Veldhorst (TU Delft, NL): <i>Quantum information processing with semiconductor technology: from qubits to integrated quantum circuits</i>
11:30	FQA - I. Maillette de Buy Wenniger (CNRS, Univ. Paris-Saclay, FR): <i>Coherence-enabled charge and discharge of a quantum battery</i>	QMET - L. Balembois (Univ. Paris-Saclay, CEA, CNRS, FR): <i>Detecting spins by their fluorescence with a microwave photon counter</i>	
12:00	FQA - A. Essig (Univ. Lyon, ENS Lyon, CNRS, FR): <i>Multiplexed photon number measurement</i>	QMET - A. Serafin (ENS Ulm, FR): <i>Nuclear Spin-Squeezing of Helium-3 via continuous Quantum Non-Demolition measurement</i>	QPAC - C. Chareton (Univ. Paris-Saclay, CEA, FR): <i>A Deductive Verification Framework for Circuit-building Quantum Programs</i>
12:30	Lunch	Lunch	Lunch
14:00	FQA - H. Le Jeannic (Uni. Copenhagen, DK & Univ. Bordeaux, CNRS, FR): <i>Few-photons nonlinearity induced by a single quantum dot well-coupled to a photonic waveguide</i>	Tutorial - QCOM - J. Thompson (Princeton Univ., USA): <i>Quantum technologies with single rare earth ions</i>	QPAC - O. Buisson (Univ. Grenoble Alpes, CNRS, FR): <i>Fast high fidelity quantum non-demolition superconducting qubit readout</i>
14:30	QSIM - A. Raymond (Univ. Paris, CNRS, FR): <i>Anyonic two-photon statistics with a semi-conductor chip</i>		QCOM/QPAC - B. Asenbeck (Sorbonne Univ., CNRS, ENS-Univ. PSL, FR): <i>Optical quantum hybrid information processing</i>
15:00	QSIM - Q. Fontaine (Univ. Paris-Saclay, CNRS, FR): <i>Observation of KPZ universal scaling in a one-dimensional polariton condensate</i>	Invited talk - QCOM - A. Fedrizzi (Heriot-Watt Univ., UK): <i>Quantum networking with photonic graph states</i>	Closing session - A. Dréau
15:30	Coffee break	Coffee break	
16:00	QSIM - M. Filippone (Univ. Grenoble Alpes, CEA, FR): <i>Quantum simulation with solid-state quantum technologies : Observing many-body localization in a superconducting qubit array</i>	Tutorial - QMET - Ronald Walsworth (Univ. Maryland, USA): <i>Quantum sensing with NV centers in diamond</i>	
16:30	QSIM - G. Bornet (Univ. Paris-Saclay, CNRS, FR): <i>Microwave-engineering of programmable XXZ Hamiltonians in arrays of Rydberg atoms</i>		
17:00	Tutorial - QSIM - M. Schleier-Smith (Stanford Univ., USA): <i>Programmable Interactions and Emergent Geometry</i>	Invited talk - QMET - A. Sipahigil (Berkeley Univ., USA): <i>Optical interconnects for superconducting quantum processors</i>	
17:30			
18:00	Poster session 1: FQA, QCOM	Poster session 2: QMET, QSIM, QPAC	
18:00			
19:00			
19:30			