

3rd colloquium GdR TeQ. **Quantum Technologies**

November, 12-14, 2025 3 Parvis Louis Néel - Grenoble - France

Wednesday, Nov. 12	Thursday, Nov. 13	Friday, Nov. 14
	09:00 - 09:40: V. Vilasini - Invited (FQA) Quantum causality meets spacetime	09:00 - 10:00: Alexei Ourjoumtsev - Tutorial (QCOM) Non-linear quantum optics
	09:40 - 10:00: Uta Meyer - Robustly self-testing all maximally entangled states in every finite dimension	10:00 - 10:20: Kiara Hansenne - <i>No quantum advantage</i>
10:15 - 10:45	10:00 - 10:20: Xiangling Xu - Quantitative quantum soundness for all multipartite compiled nonlocal games 10:20 - 10:40: Romaric Journet - Iterative generation of free-	without classical communication: fundamental limitations o quantum networks
Welcome Coffee	propagating superposition of coherent states of light using a quantum memory cavity	10:20 - 10:40: Hugo Jacinto - Network Requirements for Distributed Quantum Computation
10:45 - 11:10 Opening session	10:40 - 11:00: David Theidel - Certifiying Non-Classicality of High-Harmonic Generation in Semiconductors	10:40 - 11:10 Coffee break
	11:00 - 11:30 Coffee break	11:10 - 11:30: Enky Oudot - Long-distance device- independent quantum key distribution
11:10 - 12:10: Andreas Wallraff - Tutorial (QPAC) Superconducting circuits	11:30 - 11:50: Carlos De Gois - Overlapping tomography of fermionic simulators	11:30 - 11:50: Yoann Piétri - High-Performance Heterodyne Receiver for Quantum Information Processing in a Laser Written Integrated Photonic Platform
	11:50 - 12:10: Jean-Samuel Tettekpoe - Coherence Limits in Interference-Based cos(2phi) Qubits	11:50 - 12:10: Abel Hugot - Approaching optimal microwave acoustic transduction on lithium niobate using SQUID arrays
12:10 - 12:30: Lucas Ruela - High fidelity at high power and suppression of measurement induced state transitions in transmon readout using a non-linear coupling	12:10 - 12:30: Baptiste Carles - Experimental quantum reservoir computing with a circuit quantum electrodynamics system	12:10 - 12:30: Lorenzo Lazzari - Biphoton state generation and engineering with hybrid III-V/Silicon photonic devices
12:30 - 14:00 Lunch break	12:30 - 14:00 Lunch break	12:30 - 14:00 Lunch break
14:00 - 14:40: André Chailloux - Invited (QPAC) Quantum Algorithms Inspired by Regev's Reduction	14:00 - 14:40: Alberto Amo - Invited (QSIM) Topology and noise in networks of photonic unitary operators	14:00 - 15:00: Maria Chekhova - Tutorial (TEM) Quantum measurement through parametric amplification
14:40 - 15:00: Andreas Bluhm - Efficient learning and simulation of quantum continuous variable systems	14:40 - 15:00: Alessandro Zecchetto - High-dimensional entanglement and topological protection in nonlinear waveguide arrays	
L5:00 - 15:20: Paul Hermouet - On the Quantum Equivalence between S/LWE) and ISIS	15:00 - 15:20: Eloi Flament - Unitary Transformations using Robust Optimal Control on a Cold Atom Qudit	15:00 - 15:20: Hani Naim - High-performance solid-state quantum memory in a low-vibration in-house built cryostat
15:20 - 15:40: Sami Abdul Sater - Verification of Universal Quantum Computations with single-qubit Pauli measurements	15:20 - 15:50 Coffee break	15:20 - 15:40: Antoine Covolo - Protecting collective qubits from non-Markovian dephasing
15:40 - 16:10 Coffee break	15:50 - 16:30: Franck Pereira Dos Santos - Invited (QMET) Measuring short range forces with quectonewton stability	15:40 - 16:10 Closing session
16:10 - 17:10: Nathan Goldman - Tutorial (QSIM) Quantum geometry, dichroism and sum rules	16:30 - 16:50: Ali Moshiri - Deterministic nuclear spin squeezing and squeezing by continuous measurement using vector and tensor light shifts 16:50 - 17:10: Emilio Annoni - Optimal characterization of multi-photon distinguishability	
17:10 - 17:30: Young Aurore - Non-destructive optical read- out and manipulation of circular Rydberg atoms	17:10 - 19:00	
17:30 - 19:30 Poster session	Poster session	

19:00 - ... Banquet + After party

FQA

QMET

QCOM

TEM

QSIM

QPAC