ICE-10: Quantum Information in Spain

Tuesday 21 October 2025

POSTER SESSION: First Session - Auditorio Joan Plaça (17:20-19:30)

time	[id] title	presenter
17:20	[343] Semiclassical dynamics of discrete Jackiw-Rebbi model	KAHAN, Alan
17:23	[344] Quantum Equilibration with continuous variables	ACEVEDO, Alberto
17:26	[345] Spin-1 Control of NV Centers via Pulses of Fixed Frequency and Amplitude	LÓPEZ-GARCÍA, Alberto
17:29	[346] Study of the relaxometry technique for sensing with nanodiamonds inside cells	MARTÍNEZ MÉNDEZ, Alejandro
17:32	[347] How to make a "quantum" computer	MATA ALI, Alejandro
17:35	[348] The quest for quantum nonlocality in the smallest triangle network	POZAS-KERSTJENS, Alex
17:38	[349] Marginal second-order moments do not suffice for entanglement detection	GARCÍA VELO, Alfonso
17:41	[350] Asymmetries of thermal processes in open quantum systems	TEJERO, Álvaro
17:44	[351] Exact fluctuation in a driven-dissipative spin chain	GEA CABALLERO, Ana Teresa
17:47	[352] Accelerating Quantum Imaginary Time Evolution	ANGLÉS-CASTILLO, Andreu
17:50	[353] Quditto: A Platform for Emulating and Managing Quantum Key Distribution Networks	DIAZ-BRICIO, Angela
17:53	[354] Simulation of Polarization Dynamics in Carbon-13-Based Quantum Simulators	VERDÚ, Antonio
17:56	[355] Quantum state exclusion for group-generated ensembles of pure states	DIEBRA HUERTAS, Arnau
17:59	[356] Fidelity bounds for spin-dependent kicks with pulsed lasers	SAGASETA PAGÁN, Carlos
18:02	[357] Design and testing of a silica glass microfluidic device for quantum sensing based on NV centers	MARTÍNEZ LÓPEZ, Carmen María
18:05	[358] Surface code error correction on IBM heavy-hex devices	BENITO LAMATA, César
18:11	[360] Generating custom circuit cutting decompositions for arbitrary diagonal unitary operators	RODRIGUEZ-RAMOS, Constantino
18:17	[362] Predictability of quantum observables of top quarks quantum states in QCD	MARTÍNEZ MORENO, Dennis Itzel
18:20	[363] Uncertainty relations and entanglement with finite Fourier transformed variables	THAKURIA, Dimpi
18:23	[364] Hamiltonian Learning with Reshaping via Quantum Zeno Effect	PAGLIARO, Egle
18:26	[365] Self-testing tilted strategies for maximal loophole-free nonlocality	PANWAR, Ekta
18:29	[366] Telling different unravelings apart via nonlinear quantum-trajectory averages	PIÑOL JIMENEZ, Eloy
18:32	[367] Interferometric Mass Photometry at the Quantum Limit of Sensitivity	KÖSE, Emre

18:35	[368] Exploring the limits of many-body quantum metrology via adiabatic dynamics	LUSZCZAK, Erik
18:38	[369] Towards a Regional Quantum Hub: SCAYLE's Integrated Infrastructure for Quantum Research and Services	CRESPO GONZÁLEZ, Ignacio Samuel
18:41	[370] Deterministic randomness extraction for measurement-device-independent QRNGs	FERNÁNDEZ MARTOS, Tomás
18:44	[371] Daemonic Ergotropy In Continuously Monitored Dicke Quantum Batteries	CENEDESE, Gabriele
18:47	[372] Quantum algorithms for algebraic structures and their complexities	LUGILDE FERNÁNDEZ, Guillermo
18:50	[373] Deterministic generation of bosonic states for quantum error correction	LALUEZA PUÉRTOLAS, Javier
18:53	[374] Benchmarking Quantum Machine Learning Models for Multivariable Time-Series Forecasting	BONILLA, Jesús
18:56	[375] Flurosecent nanodiamonds for Quantum Sensing	MORENO MESEGUER, Jesús
18:59	[376] Sensitivity enhancement and quantum correlation detection of non-Gaussian states with measurement-after-interaction strategies	GUO, Jiajie
19:02	[377] Absolute separability and entanglability in arbitrary dimensions	ABELLANET, Jofre
19:05	[378] Heat operator approach to quantum stochastic thermodynamics in the strong-coupling regime	PANDIT, Mahasweta
19:07	[381] Quantum Simulations of QCD within a particle-based codification	GÁLVEZ-VIRUET, Juan José

Thursday 23 October 2025

POSTER SESSION: Second Session - Auditorio Joan Plaça (17:20-19:30)

time	[id] title	presenter
17:20	[379] CUNQA: a Distributed Quantum Computing platform for HPC environments	VÁZQUEZ PÉREZ, Jorge
17:23	[380] Quantum Feature Selection on Rydberg atom arrays	ORQUÍN MARQUÉS, José Javier
17:29	[382] Sampling Groups of Pauli Operators to Enhance Direct Fidelity Estimation	BARBERÀ RODRÍGUEZ, Júlia
17:32	[383] A Decoder-Independent Metric for Evaluating Noise-Aware Implementations of the Steane Code	RODRÍGUEZ-SORIANO, Laura
17:35	[384] Three-Basis Loop-Back QKD for Scalable Quantum Networks	LIZAMA PÉREZ, Luis Adrián
17:38	[385] Thermodynamic adequacy of the Floquet-Lindblad Master equation	TOLEDO TUDE, Luisa
17:41	[386] Approximate Prepare-and-Measures Simulation For d>2	ZARTAB, Mani
17:44	[387] Generation of quantum-entangled light in self-pulsing optical cavities	CUENCA LARÀS, Marc
17:47	[388] Toward a Full-Stack Resource-Performance Model for Photonic Quantum Architectures	FERNÁNDEZ MARTÍNEZ, Marc
17:50	[389] Microwave-free dynamical polarization strategy for 13C near the Ground State Level Anticrossing (GSLAC) in Nitrogen-vacancy centers	HERNÁNDEZ RODRÍGUEZ, Marcos
17:53	[390] The Quantum Agreement Theorem	GARCÍA DÍAZ, María
17:56	[391] Classical and Hybrid Quantum Machine Learning for Neutrino Event Reconstruction: A Study with the IceCube TXS 0506+056 Dataset (2008–2017)	GARCÍA HERNÁNDEZ, Maria Inmaculada
17:59	[392] Quantum computing for the design of antibiotics	MUSSA JUANE, MARIAMO
18:02	[393] Distributed Quantum Extreme Learning Machines	GILI ESTEVA, Marta
18:05	[394] Distributed Variational Quantum Eigensolver across different noise profiles	LOSADA, Marta
18:08	[395] Variational quantum regressors for renewable energy forecasting	SOTÉS, Miguel
18:11	[396] A quantum pendulum clock	MEHBOUDI, Mohammad
18:14	[397] Phase transitions in the 1-D Galuber Ising model	BERA, Mohit
18:17	[398] Entanglement assisted in energy bounded scenario with an application to channel discrimination	D'AVINO, Raffaele
18:20	[399] A new approximate Eastin-Knill theorem	ALEXANDER, Rhea
18:23	[400] Quantum sensing of a quantum field	RAVELL RODRÍGUEZ, Ricard
18:26	[401] Time correlations from steady-state expectation values	DI CANDIA, Roberto
18:29	[402] Architecture-Centric Design of Quantum Neural Networks	MARTÍNEZ SANZ, Rodrigo
18:32	[403] Quantum-enhanced metrology using non-Gaussian states	GORDILLO HACHUEL, Rubén
18:35	[404] Activation-aware Tensorization and Compression of Neural Networks	HAMRERAS, Safa
18:38	[405] Unraveling Chaos and Ergodicity in Quantum Battery Charging	V. ROMERO, Sebastián

18:41	[406] Controllability of systems with a non-canonical singularity	DE MARIA GARCIA, Sergio
18:44	[407] Topological crystals and soliton lattices in a Gross-Neveu model with Hilbert-space fragmentation	CEREZO ROQUEBRÚN, Sergio Guillermo
18:47	[408] Characterizing high-dimensional multipartite entanglement from the covariances	Dr. LIU, Shuheng
18:50	[409] Novel physically-realizable quantum optical neural networks	KRASIMIROV IVANOV, Todor
18:53	[410] On the Contextuality of Multi-Agent Quantum Paradoxes via Anomalous Weak Values	IZQUIERDO, Víctor