# QCTiP24 Accepted Posters

## Poster Allocations

**Poster session 1** is happening on **Day 1, 16th of April, 17:45-19:30** (marked in blue)
**Poster session 2** is happening on **Day 2, 17th of April, 17:45-19:1**. (marked in yellow)
Please find your session in the table below.

**Poster Size:** Our recommended poster size for the conference is **A1**. However, in case you have a poster printed already, we can accommodate up to an **A0-size portrait** (A0 landscape won't fit!)

| Poster Submission Number | Allocated Session (Day1 or 2) | Title |
|---|---|---|
| 2 | 1 | Overhead-constrained circuit knitting for variational quantum dynamics |
| 7 | 2 | On the expressivity of embedding quantum kernels |
| 8 | 2 | Improving the speed of variational quantum algorithms for quantum error correction |
| 11 | 1 | Persistent Non-Gaussian Correlations in Out-of-Equilibrium Rydberg Atom Arrays |
| 17 | 2 | Almost Optimal Computational Basis State Transpositions |
| 20 | 1 | Improved Financial Forecasting via Quantum Machine Learning |
| 22 | 1 | Port-based entanglement teleportation via noisy resource states |
| 25 | 2 | No free lunch theorems for quantum state measurements as resources in classical sampling and generative modelling |
| 26 | 1 | Low-Overhead Parallelisation of LCU via Commuting Operators |
| 28 | 2 | Fault Tolerance Beyond Clifford |
| 29 | 2 | Simulating experimental implementations of virtual distillation on noisy modular quantum hardware |
| 34 | 1 | Geodesic Algorithm for Unitary Gate Design with |

| | | Time-Independent Hamiltonians |
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| 38 | 1 | On Quantum Natural Policy Gradients |
| 39 | 1 | What can we learn from Quantum Convolutional Neural Networks |
| 40 | 1 | Efficient Implementation of Multi-Controlled Quantum Gates |
| 42 | 2 | Probing contextuality and quantum coherences using the quantum Cheshire cat paradox |
| 44 | 2 | A hybrid quantum algorithm to detect conical intersections |
| 45 | 1 | Exact results on finite size corrections for surface codes tailored to biased noise |
| 47 | 1 | Error-corrected Hadamard gate simulated at the circuit level |
| 48 | 2 | Information locking and its resource-efficient extraction |
| 49 | 2 | Quantum Fourier Networks for Solving Parametric PDEs |
| 50 | 1 | Quantum-classical hybrid GANs: their use in chemistry simulation and beyond |
| 52 | 1 | Time-optimal multi-qubit gates: Complexity, efficient heuristic and gate-time bounds |
| 53 | 2 | Energy Efficiency of Quantum Statevector Simulation at Scale |
| 57 | 2 | Symmetry breaking in geometric quantum machine learning in the presence of noise |
| 58 | 1 | Tunable Coupler to fully decouple and maximally localize superconducting qubits |
| 61 | 1 | Efficient stabilizer entropies for quantum computers |
| 62 | 2 | Encoding optimization for quantum machine learning demonstrated on a superconducting transmon qutrit |
| 67 | 2 | Efficient quantum amplitude encoding of polynomial functions |
| 68 | 1 | Noise-aware quantum amplitude estimation |
| 72 | 1 | Lift-Connected Surface Codes |
| 73 | 1 | The power of shallow-depth Toffoli and qudit quantum circuits |
| 75 | 2 | Data-driven decoding of quantum error correcting codes using graph neural networks |

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| 76 | 2 | Benchmarking the algorithmic performance of near-term neutral atom processors |
| 79 | 1 | Implementing the quantum fanout operation with simple pairwise interactions |
| 81 | 1 | Quantum Computed Green's Functions using a Cumulant Expansion of the Lanczos Method |
| 83 | 1 | Practical Quantum Simulations from Error Mitigation and Qubit Subspace Techniques |
| 85 | 2 | On fundamental aspects of Quantum Extreme Learning Machines |
| 86 | 2 | |
| 89 | 1 | Highly Efficient Encoding for Job-Shop Scheduling Problems and its Application on Quantum Computers |
| 90 | 1 | EXISTENTIAL UNFORGEABILITY IN QUANTUM AUTHENTICATION FROM QUANTUM PHYSICAL UNCLONABLE FUNCTIONS BASED ON RANDOM VON NEUMANN MEASUREMENT |
| 91 | 2 | Calculating many-body density of states on quantum computers |
| 97 | 2 | Shell-model study of ? using quantum computing algorithm |
| 98 | 2 | Finite-round quantum error correction on symmetric quantum sensors |
| 99 | 1 | Biased Estimator Channels for Classical Shadows |
| 102 | 2 | A blockBP decoder for the surface code |
| 107 | 2 | Error-tolerant quantum convolutional neural networks for symmetry-protected topological phases confirmed |
| 108 | 2 | |
| 118 | 1 | |
| 120 | 1 | Estimating the coherence of noise in intermediate-scale quantum systems |
| 124 | 1 | Squared overlap calculations with linear combination of unitaries |
| 127 | 1 | Multi-client distributed blind quantum computation with the Qline architecture |
| 130 | 2 | A Genetic Quantum Annealing Algorithm |

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| 133 | 2 | Mitigating photon loss in linear optical quantum circuits |
| 134 | 2 | Simulating dynamical phase transitions in the thermodynamic limit with quantum tensor network circuits |
| 135 | 2 | Predicting Arbitrary State Properties from Single Hamiltonian Quench Dynamics |
| 137 | 2 | |
| 139 | 1 | Encoding quantum circuits onto graphs: computation of probability amplitudes via permanent |
| 141 | 1 | Geometric quantum machine learning of BQP^A protocols and latent graph classifiers |
| 142 | 1 | Learning Quantum Processes with Quantum Statistical Queries |
| 143 | 2 | The closed-branch decoder for quantum LDPC codes |
| 152 | 2 | Quantum state preparation of gravitational waves |
| 157 | 2 | Heuristic-free Verification-inspired Quantum Benchmarking |
| 159 | 2 | A New Monogamy Game for Coset States With Applications to Copy-Protection |
| 161 | 1 | |
| 163 | 1 | State Purification with Symmetry Subgroup Projectors |
| 164 | 2 | Performance analysis of a filtering variational quantum algorithm |
| 165 | 2 | Constrained and Vanishing Expressivity of Quantum Fourier Models |
| 168 | 2 | Restricted Randomized Benchmarking with Universal Gates of Fixed Sequence Length |
| 170 | 2 | Experimental certification of contextuality, coherence and dimension in a programmable universal photonic processor |
| 173 | 2 | |
| 174 | 1 | Investigation of multi-qubit tunable coupler for parallel stabiliser readout |
| 175 | 1 | |
| 176 | 1 | To NISQ, and Beyond! The impact of noise on quantum simulation, and looking forward to accessibility of a quantum internet |

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| 179 | 2 | A Quantum Computing Approach for Multi-robot Coverage Path Planning |
| 180 | 1 | Bounded Advice Classes |
| 181 | 2 | Quantum Error Mitigation via Linear Depth Verifier Circuits |
| 182 | 1 | Two-level decoding schemes for the XYZ^2 hexagonal stabilizer code |
| 183 | 2 | Experimental Steane error-correction |
| 184 | 2 | Efficient Learning of Long-Range and Equivariant Quantum Systems |
| 185 | 1 | Reduced qubit requirements for the quantum simulation of chemistry with virtual orbital localization in projection-based embedding |
| 186 | 1 | Tableaux Manipulation: Clifford compilation for quantum stabiliser circuits |
| 187 | 2 | Development of a quantum computing course for undergraduate computer science students |
| 188 | 2 | Improving logical qubit fidelity by using IQ readout information |
| 189 | 2 | Solver aided search for colour codes |
| 190 | 1 | Exact circuit implementation of S^2-conserving fermionic UCCSD-singlet excitations |
| 191 | 1 | Behaviors of quantum neural network compared to classical models |
| 192 | 1 | Employing Quantum Information Science to Model Bacteria Growth |
| 193 | 1 | Implications of "Log-Sobolev" concentration inequalities for quantum machine learning |
| 194 | 1 | Low-depth measurement-based deterministic quantum state preparation |
| 195 | 1 | Introducing Actuation into Koopman Operator Learning of Loss Trajectories in Variation Quantum Algorithms |
| 196 | 1 | (In)finite Distance Extrapolation: how error mitigation complements quantum error correction |
| 197 | 2 | Encoding strong correlation in quantum chemistry on quantum computers |
| 198 | 2 | A Reinforcement Learning approach to Hamiltonian Eigenvalue Solving |