POSTER SESSION 1 - Monday, August 10 at 6 pm

Poster number	Submission Number	Authors	Title
1	2	Sascha Heußen, David Locher and Markus Müller	Measurement-free fault-tolerant quantum error correction in near-term devices
2	3	Sascha Heußen and Janine Hilder	Efficient fault-tolerant code switching via one-way transversal CNOT gates
3	4	Timo Hillmann, Guillaume Dauphinais, Ilan Tzitrin and Michael Vasmer	Single-shot and measurement-based quantum error correction via fault complexes
4	10	Mohamed Shalby, Renyu Wang, Denis Sedov and Leonid Pryadko	Optimized noise-resilient surface code teleportation interfaces
5	11	James Purcell, Abhishek Rajput and Toby Cubitt	Fault-Resilience of Dissipative Processes for Quantum Computing
6	12	Hasan Sayginel, Stergios Koutsioumpas, Mark Webster, Abhishek Rajput and Dan Browne	Fault-Tolerant Logical Clifford Gates from Code Automorphisms
7	15	Stergios Koutsioumpas, Hasan Sayginel, Mark Webster and Dan Browne	Automorphism Ensemble Decoding of Quantum LDPC Codes
8	16	Virgile Guemard and Gilles Zémor	Moderate-length lifted quantum Tanner codes
9	17	Zhaoyi Li, Honghao Fu, Takuya Isogawa and Isaac Chuang	Optimal and Efficient Quantum Purity Amplification for General Noisy Quantum Systems
10	21	Andrew Tanggara, Mile Gu and Kishor Bharti	The Universal Spatio-Temporal Framework for Quantum Error-Correction
11	22	Yixu Wang, Yijia Xu and Zi-Wen Liu	Tessellation codes: encoded quantum gates by geometric rotation
12	24	Matthew Steinberg, Junyu Fan, Jens Eisert, Sebastian Feld, Alexander Jahn and Chunjun Cao	Universal Fault-Tolerant Logic with Heterogeneous Holographic Codes
13	27	Yugo Takada and Hayata Yamasaki	Doubly-polylog-time-overhead fault-tolerant quantum computation by a polylog-time parallel minimum-weight perfect matching decoder
14	31	Noah Berthusen, Shi Jie Samuel Tan, Eric Huang and Daniel Gottesman	Adaptive Syndrome Extraction
15	35	John Kam, Spiro Gicev, Kavan Modi, Angus Southwell and Muhammad Usman	Detrimental non-Markovian errors for surface code memory
16	37	Riki Toshio, Yutaro Akahoshi, Jun Fujisaki, Hirotaka Oshima, Shintaro Sato and Keisuke Fujii	Practical quantum advantage on partially fault-tolerant quantum computer
17	40	Andrey Khesin, Jonathan Lu and Peter Shor	Universal graph representation of stabilizer codes
18	46	Theerapat Tansuwannont, Yugo Takada and Keisuke Fujii	Clifford gates with logical transversality for self-dual CSS codes
19	47	Theerapat Tansuwannont and Andrew Nemec	Synchronizable hybrid subsystem codes
20	52	Francesco Cesa, Hannes Bernien and Hannes Pichler	Fast and Error-Correctable Quantum RAM
21	57	Joonas Majaniemi and Elisha Matekole	Reducing quantum error correction overhead using soft information
22	62	Lane Gunderman	Stabilizer codes: the continuous, the infinite, and the composite
23	65	Abbas Ziad, Ankit Zalawadiya, Canberk Topal, Joan Camps, Gyorgy Geher, Matthew Stafford and Mark Turner	Local Clustering Decoder: a fast and adaptive hardware decoder for the surface code
24	66	Xanda Kolesnikow, Thomas Smith, Felix Thomsen, Abhijeet Alase and Andrew Doherty	Protected phase gate for the 0-π qubit using its internal modes
25	67	Seok-Hyung Lee, Felix Thomsen, Nicholas Fazio, Benjamin J. Brown and Stephen D. Bartlett	Low-overhead magic state distillation with color codes
26	70	Zihan Chen, Mingcheng Chen, Chaoyang Lu and Jianwei Pan	Efficient Magic State Cultivation on RP2
27	71	Zihan Chen, Mingcheng Chen, Chaoyang Lu and Jianwei Pan	Transversal Logical Clifford gates on rotated surface codes with reconfigurable neutral atom arrays
28	72	Shintaro Sato and Yasunari Suzuki	Scheduling of syndrome measurements with a few ancillary qubits
29	74	Yutaka Hirano and Keisuke Fujii	Locality-aware Pauli-based computation
30	80	Tomohiro Itogawa, Yugo Takada, Yutaka Hirano, Yutaro Akahoshi and Keisuke Fujii	Efficient Magic State Distillation by Zero-level Distillation
31	83	Mark Webster, Stergios Koutsioumpas and Dan Browne	Heuristic and Optimal Synthesis of CNOT and Clifford Circuits
32	85	Ryan Tiew and Nikolas Breuckmann	Low-Overhead Entangling Gates from Generalised Dehn Twists
33	87	Ansgar Burchards	Continuous-Variable Quantum MacWilliams Identities
34	91	Keita Hidaka, Dina Abdelhadi and Ruediger Urbanke	Interpolation of Quantum Polar Codes and Quantum Reed-Muller codes
35	95	Hugo Jacinto, Élie Gouzien and Nicolas Sangouard	Network Requirements for Distributed Quantum Computation
36	96	Liyuan Chen, Yuanjie Ren, Ruihua Fan and Arthur Jaffe	A Universal Circuit Set Using the S3 Quantum Double
37	98	Samuel Dai, Ray Li and Eugene Tang	Optimal Locality and Parameter Tradeoffs for Subsystem Codes
38	102	Zijian Song and Guanyu Zhu	Magic Boundaries of 3D Color Codes
39	103	Yabo Li, Zijian Song, Aleksander Kubica and Isaac Kim	Domain walls from SPT-sewing
40	111	Dian Jing, Liang Jiang and Ruben Verresen	Intrinsic Heralding for Decoding D4 Topological Codes
41	114	Esha Swaroop, Tomas Jochym-O'Connor and Theodore Yoder	Universal Adapters between quantum LDPC codes

42	115	Benjamin Anker and Milad Marvian	Compressing Syndrome Extraction in Space-Time
43	120	Sourav Dutta, Aditya Jain and Prabha Mandayam	Smallest quantum codes for amplitude-damping noise
44	126	Edwin Tham and Nicolas Delfosse	Low-cost noise reduction for Clifford circuits: Theory, simulations and experiments
45	135	Julio Carlos Magdalena de la Fuente, Josias Old, Alex Townsend-Teague, Manuel Rispler, Jens Eisert and Markus Müller	XYZ ruby code: Making a case for a three-colored graphical calculus for quantum error correction in spacetime
46	136	Su-un Lee, Ming Yuan, Senrui Chen, Kento Tsubouchi and Liang Jiang	Efficient benchmarking of logical magic state

POSTER SESSION 2 - Tuesday, August 11 at 5:30 pm

Poster number	Submission Number	Authors	Title
47	138	Sam Roberts, Hector Bombin, Chris Dawson, Terry Farrelly, Daniel Litinski, Ye-Hua Liu, Naomi Nickerson, Mihir Pant, Fernando Pastawski, Karthik Seetharam and David Tuckett	Macroscale multiplexing: Scalable postselection for high-threshold fault-tolerant quantum computation
48	139	Stefano Veroni, Alexandru Paler and Giacomo Giudice	Universal quantum computation via scalable measurement-free error correction
49	144	Antonio de Marti i Olius, Imanol Etxezarreta Martinez, Joschka Roffe and Josu Etxezarreta Martinez	An almost-linear time decoding algorithm for quantum LDPC codes under circuit-level noise
50	146	Kathleen Chang, Qile Su and Shruti Puri	Teleportation decoheres noise in measurement-based error correction
51	150	Laura S. Herzog, Lucas Berent, Aleksander Kubica and Robert Wille	Lattice Surgery Compilation Beyond the surface code
52	151	Alexander Frei, Aranya Chakraborty, Zachary Mann, Victor Albert and Daniel Gottesman	Stabilizer codes up to 12 qubits and the logical groups generated by their automorphisms and a complete code switching map of 7 qubit codes
53	152	Tom Peham, Ludwig Schmid, Lucas Berent, Markus Müller and Robert Wille	Optimizing Resource Overheads of Fault-tolerant State Preparation for Quantum Error Correcting Codes
54	153	Peter-Jan H.S. Derks, Alex Townsend-Teague, Jens Eisert, Markus S. Kesselring, Oscar Higgott and Benjamin J. Brown	Improving the spacetime overhead of dynamic stabilizer codes by repeating measurements
55	154	Robert Ott, Daniel González-Cuadra, Torsten V. Zache, Peter Zoller, Adam M. Kaufman and Hannes Pichler	Error-corrected fermionic quantum processors with neutral atoms
56	170	Qian Xu, Hengyun Zhou, Guo Zheng, Dolev Bluvstein, Pablo Bonilla, Mikhail Lukin and Liang Jiang	Fast and Parallelizable Logical Computation with Homological Product Codes
57	171	Ari John Boon, Nicolás Quesada and Olivier Landon-Cardinal	Adaptive all-optical telecorrection of higher-order cat codes
58	174	Vincent Steffan and Jens Niklas Eberhardt	Logical Operators and Fold-Transversal Gates of Bivariate Bicycle Codes
59	176	Ching-Feng Kung, Kao-Yueh Kuo and Ching-Yi Lai	Efficient Approximate Degenerate Ordered Statistics Decoding for Quantum Codes via Reliable Subset Reduction
60	184	Kathleen Chang, Kaavya Sahay, Pei-Kai Tsai, Qile Su, Yunzhe Zheng, Thomas Smith, Shraddha Singh, Jeff Thompson and Shruti Puri	Improved non-local magic state cultivation
61	185	Sayan Chakraborty and Victor V. Albert	Hybrid oscillator-qubit and oscillator-rotor quantum processors: stabilizer states and Clifford operations
62	187	Louis Golowich and Ting-Chun Lin	Quantum LDPC Codes with Transversal Non-Clifford Gates via Products of Algebraic Codes
63	192	Zhiyang He, Luke Robitaille and Xinyu Tan	Permutation gates in the third level of the Clifford hierarchy
64	193	Shouzhen Gu, Yotam Vaknin, Alex Retzker and Aleksander Kubica	The benefits and costs of quantum error correction with erasure qubits
65	194	Jonathan Pelletier and Baptiste Royer	Enlarging the GKP stabilizer group for enhanced noise protection
66	195	Rohith Sajith, Zijian Song, Brenden Roberts, Varun Menon and Yabo Li	Non-Clifford gates within stabilizer codes via non-Abelian topological order
67	200	Andrew Cross, Zhiyang He, Patrick Rall, Dominic Williamson and Theodore Yoder	Low-Overhead QLDPC Surgery for Logical Measurements
68	201	Dominik Hangleiter, Marcin Kalinowski, Dolev Bluvstein, Madelyn Cain, Nishad Maskara, Xun Gao, Alex Kubica, Mikhail Lukin and Michael Gullans	Fault-tolerant compiling of classically hard IQP circuits on hypercubes
69	202	Louis Golowich and Venkatesan Guruswami	Decoding Quasi-Cyclic Quantum LDPC Codes
70	203	Chen Zhao, Madelyn Cain, Hengyun Zhou, Dolev Bluvstein, Nishad Maskara, Casey Duckering, Nadine Meister, Juan Pablo Bonilla Ataides, Arthur Jaffe, Sheng-Tao Wang, Aleksander Kubica and Mikhail D. Lukin	Low-overhead Transversal Algorithmic Fault Tolerance and Correlated Decoding for Universal Quantum Computing
71	206	Alexander Poremba, Yihui Quek and Peter Shor	The Learning Stabilizers with Noise problem
72	207	Mihir Pant, Patrick Birchall, Hector Bombin and Terry Rudolph	Limits of loss tolerance in a photonic quantum computer
73	208	Mingyu Kang, Yingjia Lin, Hanwen Yao, Mert Gökduman, Arianna Meinking and Kenneth Brown	QUITS: A modular Qldpc code circUIT Simulator
74	215	Marc Serra Peralta, Mackenzie Shaw and Barbara Terhal	Decoding across fold-transversal Clifford gates in the surface code
75	216	Mahadevan Subramanian, Guo Zheng and Liang Jiang	Achievable rates for concatenated square Gottesman-Kitaev-Preskill codes
76	218	Takahiro Tsunoda	Towards Qudit Error Correcting Codes on Dual-Rail Cavities
77	221	Xiaozhen Fu, Han Zheng, Zimu Li and Zi-Wen Liu	No-go theorems for logical gates on product quantum codes

78	223	Hunter Nelson, Sophia Economou and Edwin Barnes	High conditional fidelity entangling gates for improved logical performance of biased erasure Rydberg atomic qubits
79	224	Hector Bombin, Daniel Litinski, Naomi Nickerson, Fernando Pastawski and Sam Roberts	Unifying flavors of fault tolerance with the ZX calculus
80	232	Noah Berthusen, Michael Gullans, Yifan Hong, Maryam Mudassar and Shi Jie Samuel Tan	Automorphism gadgets in homological product codes
81	233	Hanwen Yao, Mert Gökduman and Henry Pfister	Erasure Decoding of Quantum LDPC Codes
82	235	Gerard Munne, Andrew Nemec and Felix Huber	SDP Bounds on Quantum Codes
83	236	Simon Martiel and Ali Javadi-Abhari	Low-overhead error detection with spacetime codes
84	240	Kyle Gulshen and Tali Kaufman	Quantum Tanner Color Codes on Qubits with Transversal Gates
85	242	Tom Harris, Takaya Matsuura, Ben Baragiola and Nicolas Menicucci	Logical channel induced by heralded and average loss for the Gottesman-Kitaev-Preskill code
86	245	Xiao Xiao, Dominik Hangleiter, Dolev Bluvstein, Mikhail Lukin and Michael Gullans	Efficient Noise and Fidelity Estimation of Fault-Tolerant Quantum Circuits
87	248	Anqi Gong and Joseph Renes	Computation with Quantum Reed-Muller Codes and their Mapping onto 2D Atom Arrays
88	252	Michael Lawler, Gaurav Gyawali, Henry Shackleton and Zhu-Xi Luo	Emergent coding phases and hardware-tailored quantum codes
89	256	Alexander Malcolm, Andrew Glaudell, Patricio Fuentes, Daryus Chandra, Alexis Schotte, Colby DeLisle, Rafael Haenel, Amir Ebrahimi, Joschka Roffe, Armanda Quintavalle, Stephanie Beale and Nicholas Lee-Hone	Computing Efficiently in QLDPC Codes
90	260	Samo Novák	Quantum error correction with rotors and torsion
91	261	Aaron Friedman, Jinkang Guo, Oliver Hart, Anthony Chen and Andrew Lucas	Designing open quantum systems with known steady states: Davies generators and beyond
92	262	Shawn Geller, Emanuel Knill, Scott Glancy, Yi-Kai Liu, Aaron Friedman and Alexander Kwiatkowski	The Open Quantum Challenge

POSTER SESSION 3 - Thursday, August 14 at 5:30 pm

Poster number	Submission Number	Authors	Title
93	263	Hideyuki Ozawa and Tsuyoshi Yoshida	Resource-Efficient Dynamics: Designing Floquet Codes with High Encoding Rates and Fewer Gates
94	264	Daniel Pranjic and Vamshi Mohan Katukuri	Higher-order feedback-based quantum control with decoupled counterdiabatic driving
95	265	Adrian Skasberg Aasen, Andras Di Giovanni, Hannes Rotzinger, Alexey Ustinov and Martin Gärttner	Mitigation of correlated readout errors without randomized measurements
96	267	Josiah Cochran, Haley Cole, Hebah Goderya, Zhuoqun Hao, Theo Shaw, Aikaterini Kargioti and Shyam Shankar	Experimental investigations of coupling between a transmon and a Kerr-Cat qubit
97	268	Kenta Kasai	Towards Practical Quantum Error Correction: Near-Optimal Performance and Floor Mitigation via Non-Binary LDPC Codes
98	270	Javier Lalueza Puértolas, Alberto Muñoz de Las Heras and Alejandro González Tudela	Improving GKP state generation with programmable, deterministic strategies
99	271	Fei Dai and Xin Wang	Quantum Optimal Control via Universal Gate Compilation
100	273	Hyeonjun Yeo, Ha Eum Kim, Ilkwon Sohn and Kabgyun Jeong	Reducing Circuit Depth in Quantum State Preparation for Quantum Simulation Using Measurements and Feedforward
101	274	Yujin Kang, Youshin Chung, Sungyeon Kook and Jun Heo	Resource-efficient logical qubit architectures for magic state consumption
102	275	Maryam Mudassar and Daniel Gottesman	Fault tolerance in Majorana codes
103	276	Sujeet Bhalerao	Optimizing coherent information of graph states with Pauli noise using genetic algorithms
104	278	Chao Zhang, Zipeng Wu, Shilin Huang and Bei Zeng	Transversal Gates in Nonadditive Quantum Codes
105	280	Cory Aitchison and Benjamin Béri	Competing automorphisms and disordered Floquet codes
106	285	Raul Conchello Vendrel, Ish Dhand, Kshitij Kapoor, Shreya Prasanna Kumar, Marcello Massaro, Ivan Ogbolin, Martin B Plenio, Matteo Santandrea, Varun Seshadri and Raphael Weber	Unified framework for obtaining fault-tolerance thresholds of arbitrary hardware imperfections
107	286	Cole Maurer	Efficient optimal decoding of quantum error correcting codes with matchgate tensor networks
108	287	Julie Campos and Kenneth Brown	Non-Foliated Cluster States under Biased Noise Models
109	288	Margaret Pavlovich, Peter Rakich and Shruti Puri	Optomechanical resource for fault-tolerant quantum computing
110	289	Jason Chadwick, Mariesa Teo, Joshua Viszlai, Willers Yang and Fred Chong	Erasure Minesweeper: exploring hybrid-erasure surface code architectures for efficient quantum error correction
111	290	Ashutosh Kumar, Majid Haghparast and Lauri Kettunen	RNN-Inspired Decoder For Heavy Hex Quantum Error Correction Code
112	291	Refaat Ismail, I-Chi Chen, Milan Kornjača, Chen Zhao, Ronen Weiss, Fangli Liu, Ionel Stetcu, Joseph Carlson, Hengyun Zhou, Sheng-Tao Wang and Andrew Somborger	Neutral atom space-time efficient analog rotation architecture
113	292	Rebecca Radebold, Stephen Bartlett and Andrew Doherty	Generating Explicit Instances of Quantum Tanner Codes
114	293	Andrea Rodriguez-Blanco, Ho Nam Nguyen and K. Birgitta Whaley	Fault-tolerant correction-ready encoding of the [[7,1,3]] Steane code on a 2D grid

115	294	Wenyuan Zhuo	Efficient quantum error correction code application
116	295	Nicole Gillett, Luka Skoric, Earl Campbell and Neil Gillespie	Parallel and low-latency streaming decoding of quantum error correction codes
117	296	Goli Nagamani and Pradeep Sarvepalli	Data Syndrome codes
118	297	Stergios Koutsioumpas, Hasan Sayginel, Abhishek Agarwal, Mark Webster, Ivan Rungger and Dan Browne	Logical Clifford Gates on the Five-Qubit Code via Automorphisms and Quantum Teleportation
119	298	Bruno Avritzer, Amanda Wei and Roderick Cochran	Connecting and Correcting Multilevel Quantum Systems
120	299	Hossein Dehghani, Michael Gullans and Sarang Gopalakrishnan	Fast Quasi-local Decoders for Topological Codes
121	300	Allen Zang, Xin-An Chen, Haoxiong Yan, Martin Suchara and Tian Zhong	Leveraging noise structure for entanglement purification
122	301	Thomas Décultot, Ronan Gautier, Jérémie Guillaud and Mazyar Mirrahimi	Protecting bosonic codes from ancilla-induced logical errors with continuous-variable flags
123	302	Terra Colvin	Generating Clifford+T sequences for the Solovay Kitaev and Randomized Compilation algorithm
124	303	Avik Mukhopadhyay and Pradeep Sarvepalli	Communication-Efficient Quantum Secret Sharing in the Presence of Malicious Adversaries
125	304	Ahmed Adel Mahmoud and Steven Rayan	Construction and Benchmarking of CSS Floquet Codes on Hyperbolic Lattices
126	305	Nitish Mehta, James Teoh, Taewan Noh, Kevin Chou, Quantum Circuits Team and Robert Schoelkopf	Bias-preserving and error-detectable entangling operations in a superconducting dual-rail system
127	306	Jason D. Chadwick, Willers Yang, Joshua Viszlai and Frederic T. Chong	Adapting the surface code to near-term spin qubit arrays with limited readout using spin shuttling
128	308	Sam Griffiths and Asmae Benhemou	Online Gaussian elimination for quantum LDPC decoding
129	310	Tyler LeBlond, Peter Groszkowski, Christopher Seck and Ryan Bennink	Logical Error Rates for Trapped Ion Surface Code Circuits Under Mixed Stochastic and Coherent Circuit-Level Noise
130	311	Eren Guttentag and Anthony Gómez-Fonseca	Fault-Tolerant QLDPC Syndrome Measurement via LDGM Encoding
131	313	Rita Ahmadi, Vojtěch Havlíček and Sydney Timmerman	A Representation-Theoretic Dictionary for Quantum Error Correction
132	314	Bohan Lu and Kenneth Brown	A dynamical error-correcting code from a minimally non-local hypergraph product code
133	316	Mark Turner, Earl T. Campbell, Ophelia Crawford, Neil I. Gillespie and Joan Camps	Scalable error correction protocols for dense transversal logic
134	318	Vladyslav Visnevskyi, Maris Ozols, Arghavan Safavi-Naini, Liam Bond and Jiri Minar	High-dimensional permutation-invariant quantum error-correcting codes
135	320	Guillermo Escobar-Arrieta and Mauricio Gutierrez	Improved performance of the Bacon-Shor code with Steane's syndrome extraction method
136	321	Zeyuan Zhou, Andrew Ji and Yongshan Ding	Characterization and Mitigation of Crosstalk in Quantum Error Correction
137	325	Shantanu Jha, Shoumik Chowdhury, Max Hays, Réouven Assouly, Anaida Ali, Lev-Arcady Sellem, David Pahl, Junyoung An, Melvin Mathews, Lukas Pahl, Jeffrey Gertler, Michael Gingras, Bethany Niedzielski, Hannah Stickler, Mollie Schwartz, Kyle Serniak, Baptiste Royer, Jeffrey Grover and William Oliver	Towards On-chip Bosonic Quantum Error Correction with a Heavy Fluxonium Control Qubit