

Causalworlds

Monday, September 16, 2024

Session B: Causality in Wigner's Friend - PI/1-100 - Theatre (1:45 p.m. - 3:00 p.m.)

time	[id] title	presenter
1:45 p.m.	[55] Relating Wigner's Friend Scenarios to Nonclassical Causal Compatibility, Monogamy Relations, and Fine Tuning	YÍNG, Yìè
2:10 p.m.	[34] A quantum circuit framework for extended Wigner's friend scenarios: logical and causal reasoning without objective events	VILASINI, V.
2:35 p.m.	[42] Emergent classicality, relativistic causality, and quantum causal structure	ORMROD, Nick

Tuesday, September 17, 2024

Session B: Indefinite Causal Order 1 - PI/1-100 - Theatre (1:45 p.m. - 3:00 p.m.)

time	[id] title	presenter
1:45 p.m.	[48] Generalizing Bell non locality without global causal constraints	KUNJWAL, Ravi
2:10 p.m.	[61] Tsirelson bounds for quantum correlations with indefinite causal order	LIU, Zixuan
2:35 p.m.	[41] Correlations and quantum circuits with dynamical causal order	MOTHE, Raphaël

Session B: Quantum reference frames - PI/1-100 - Theatre (3:45 p.m. - 5:00 p.m.)

time	[id] title	presenter
3:45 p.m.	[54] Quantum reference frames, measurement schemes and the type of local algebras in quantum field theory	JANSSEN, Daan
4:10 p.m.	[43] Fighting non-locality with non-locality: microcausality and boundary conditions in QED	KIRKLIN, Joshua
4:35 p.m.	[53] Quantum Permutations as Quantum Coordinate Transformations	BENGYAT, Ofek

Wednesday, September 18, 2024

Session B: Indefinite causal order 2 - PI/1-100 - Theatre (3:45 p.m. - 5:00 p.m.)

time	[id] title	presenter
3:45 p.m.	[57] Routing Quantum Control of Causal Order	GROTHUS, Maarten
4:10 p.m.	[58] Simulating the quantum switch using causally ordered circuits requires at least an exponential overhead in query complexity	KRISTJÁNSSON, Hlér
4:35 p.m.	[59] Knot invariants and indefinite causal order	FEDIDA, Samuel

Thursday, September 19, 2024

Session B: Causality in Spacetime Physics - PI/1-100 - Theatre (3:45 p.m. - 5:00 p.m.)

time	[id] title	presenter
3:45 p.m.	[60] Towards Relational Quantum Field Theory	GŁOWACKI, Jan
4:10 p.m.	[45] Making Sense of Relativistic Causality Conditions	MYRVOLD, Wayne
4:35 p.m.	[56] Relativistic Concepts in Point-Free Spaces	VAN DER SCHAAF, Nesta

Friday, September 20, 2024

Session B: Interface of Information-theoretic and Relativistic Causality - PI/1-100 - Theatre (3:45 p.m. - 4:35 p.m.)

time	[id] title	presenter
3:45 p.m.	[33] A decompositional framework for process theories in spacetime	SALZGER, Matthias
4:10 p.m.	[38] Characterizing Signalling: Connections between Causal Inference and Space-time Geometry	GROTHUS, Maarten