Special Issue

Quantum Correlations in Spacetime

Message from the Guest Editors

This Special Issue, Quantum Correlations in Spacetime, aims to gather contributions exploring both theoretical and experimental aspects of quantum correlations that manifest across space and time. We invite original research articles, reviews, and perspectives addressing topics including—but not limited to—temporal steering, Leggett–Garg inequalities, quantum causal models, quantum games, quantum combs or process tensors, relativistic quantum information, quantum Markovianity and non-Markovianity, spacetime entanglement structures, and measurement effects on temporal correlations. We also adopt an application-oriented perspective and invite manuscripts that apply these insights to advance current quantum technologies, such as quantum computing, quantum communications, and quantum metrology. We particularly welcome interdisciplinary works connecting quantum information theory, quantum computing, quantum foundations, and relativistic or gravitational frameworks.

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Editor-in-Chief

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