Special Issue

Quantum Entanglement and Quantum Algorithms

Message from the Guest Editors

The field of quantum information science has seen tremendous progress over the last several years, with advances in both hardware development and novel algorithms. Quantum entanglement and algorithms, in particular, represent some of the most captivating and rapidly advancing frontiers in modern physics and computer science, the former being the cornerstone of many quantum technologies, including quantum computing, cryptography, and communication. This Special Issue seeks to explore quantum entanglement, quantum algorithms, and their connections, focusing on the role of entanglement in quantum algorithms and how it contributes to quantum advantages. Quantum entanglement is a critical resource that enables quantum computers to perform complex computations more efficiently than classical computers. Understanding the intricate relationship between entanglement and algorithmic performance is essential for advancing both theoretical and practical aspects of quantum computing.

Guest Editors

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Entropy

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About the Journal

Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.
Entropy is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

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