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Quantum Correlations Used in Quantum Technologies

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Message from the Guest Editor

Dear Colleagues,

Quantum correlations represent the key ingredient in many applications of quantum technologies, which develop more and more over the last years. Quantum technologies employ the quantum mechanics principles in new phenomena with the help of the information stored in a quantum system. As examples of quantum correlations, we can enumerate: entanglement, quantum discord, quantum steering, quantum coherence. They are widely used in many processes of quantum information processing and quantum optics: quantum teleportation, quantum cryptography, superdense coding, entanglement swapping, quantum computing, quantum algorithms, quantum imaging.

This Special Issue of Entropy entitled “Quantum correlations used in quantum technologies” is dedicated to the investigation and applications of the quantum correlations in quantum technologies, covering a large number of branches in the field of quantum information processing and quantum optics.

Dr. Iulia Ghiu
Guest Editor



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Special Issue



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Message from the Editor-in-Chief

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