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New Trends in Quantum Information and Quantum Optics

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Message from the Guest Editor

In this Special Issue, we explore the modern trends in quantum optics and quantum information which highlight the central role of entropy, information theory, and quantumness in advancing quantum technologies. We welcome high-quality contributions spanning a wide range of topics, including but not limited to:

*Entropy and information theory applied to quantum optics and quantum information.

*Quantum correlations, nonlocality, and quantumness.

*States and reservoir engineering in quantum systems.

*Quantum transport and thermodynamics in controlled quantum systems.

*Quantum metrology, sensing, and precision measurements with quantum resources.

*Machine learning applied to quantum systems.



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Special Issue



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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.

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