Special Issue

The Bounds and Limits of Quantum System: Perspective and Development

Message from the Guest Editors

In this Topic, we hope to provide a broad overview of the physical bounds/limits of quantum systems. This Topic aims to span the fundamental interpretations of different physical bounds/limits; the formalisms of different quantum limits/bounds, as an alternative way of understanding quantum physics; and the gained intuition and superiority of different quantum limits/bounds to meet the increasing demand of quantum technologies in developing quantum enhanced protocols by exploiting nonclassical resources of the quantum realm. We welcome researchers to contribute Original Research and Review papers. The potential topics include, but are not limited to:

- Quantum speed limits;
- Bounds on entropy production;
- Bounds for quantum algorithms;
- Bounds on quantum gate complexity;
- Limits of quantum heat engines;
- Limits of quantum metrology.

Guest Editors

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Deadline for manuscript submissions

closed (25 July 2024)

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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.

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.

Editor-in-Chief

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