Special Issue

Quantum Correlations Used in Quantum Technologies

Message from the Guest Editor

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.

Guest Editor

Dr. Iulia Ghiu

Faculty of Physics, University of Bucharest, PO Box MG-11, R-077125 Magurele, Romania

Deadline for manuscript submissions

closed (30 November 2022)



an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



mdpi.com/si/110629

Entropy Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 entropy@mdpi.com

mdpi.com/journal/ entropy





an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



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.

Editor-in-Chief

Prof. Dr. Kevin H. Knuth

Department of Physics, University at Albany, 1400 Washington Avenue, Albany, NY 12222, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, PubMed, PMC, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Physics, Multidisciplinary) / CiteScore - Q1 (Mathematical Physics)

