Special Issue

Quantum Communication, Quantum Radar, and Quantum Cipher

Message from the Guest Editor

Quantum information science has completed its formation as a basic science thanks to the contributions of many pioneers, and now the time has come to seek practical applications based on applied research. In order to make quantum information science applicable to the real world, it is necessary to change direction to focus on engineering technology based on macroscopic qubits. If this is achieved, quantum communication will further expand the possibilities of ultrahigh-speed optical communication, quantum radar will provide the feasibility of all-weather sensors, and macroscopic quantum cryptography will contribute to enhancing the security of the physical layer of current optical networks. The purpose of this Special Issue is to consolidate and publish the latest research trends by researchers who are conducting research toward the above goals. It consists of invited papers, original papers, short reviews, and proposals for the future prospects in this field. The Foundation of Quantum ICT Institute will provide an award of USD 5000 /paper to the best papers (max two) among those included in this Special Issue.

Guest Editor

Prof. Dr. Osamu Hirota

Quantum ICT Research Institute, Tamagawa University, Tokyo 194-8610, Japan

Deadline for manuscript submissions

closed (24 October 2022)



an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



mdpi.com/si/76073

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)

