



Recent Advances in Quantum Information Processing

Guest Editors:

Prof. Dr. Zhujun Zheng

School of Mathematics, South
China University of Technology,
Guangzhou 510641, China

Dr. Maosheng Li

School of Mathematics, South
China University of Technology,
Guangzhou 510641, China

Deadline for manuscript
submissions:

closed (31 March 2024)

Message from the Guest Editors

Dear Colleagues,

After decades of development, quantum information science has made great progress. However, some basic concepts in quantum information theory (such as quantum correlation, quantum entanglement, quantum Markovianity, quantum thermodynamics, etc.) still need to be explored in depth. On the other hand, in order to meet the requirements of quantum hardware at this stage, it also poses more challenges to the theory of quantum information (for example, the quantum algorithm applicable to NISQ).

This Special Issue focuses on the recent advances in quantum information processing. We invite all kinds of contributions devoted to quantum information theory which includes but is not limited to:

- Quantum walk;
- Quantum algorithm;
- Quantum noise;
- Quantum thermodynamics;
- Quantum correlation;
- Quantum entanglement;
- Quantum nonlocality;
- Quantum discord;
- Quantum coherence;
- Quantum Markovianity;
- Quantum channel;
- Quantum states discrimination;
- von Neumann entropy.





entropy



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Kevin H. Knuth

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

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.

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)

Contact Us

Entropy Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/entropy
entropy@mdpi.com
[X@Entropy_MDPI](https://twitter.com/Entropy_MDPI)