

## Special Issue

# Quantum Computation, Communication and Cryptography

### Message from the Guest Editors

The subject area of applications involving quantum mechanics beyond the limits of classical physics has grown tremendously in the past decade, particularly regarding the theory and application of quantum entanglement and the superposition of quantum states. The representation of quantum states as quantum bits (qubits) as well as the transport and processing of quantum information has also become a leading area of research. In this Special Issue, the focus is on quantum computation, communications, cryptography, and the integration of those items. Articles focusing on theory as well as experimental results are encouraged. Topics of interest include, but are not limited to, the following topics. Authors are encouraged to combine topics of interest in a single paper where appropriate.

- Quantum Computing
- Quantum Communications
- Quantum Theory
- Quantum Materials

---

### Guest Editors

Dr. Harry Shaw

Dr. Ryan T. Glasser

Dr. Sebastian Deffner

---

### Deadline for manuscript submissions

closed (20 January 2025)



## Entropy

---

an Open Access Journal  
by MDPI

---

**Impact Factor 2.0**  
**CiteScore 5.2**  
**Indexed in PubMed**



[mdpi.com/si/189949](https://mdpi.com/si/189949)

*Entropy*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[entropy@mdpi.com](mailto:entropy@mdpi.com)

[mdpi.com/journal/  
entropy](https://mdpi.com/journal/entropy)





# Entropy

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.0  
CiteScore 5.2  
Indexed in PubMed



[mdpi.com/journal/  
entropy](https://mdpi.com/journal/entropy)



## 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)