



entropy



an Open Access Journal by MDPI

Quantum Entropies and Complexity

Guest Editor:

Dr. Fabio Benatti

Department of Physics, University
of Trieste, I-34151 Trieste, Italy

Deadline for manuscript
submissions:

closed (29 February 2020)

Message from the Guest Editor

Dear Colleagues,

Revolutionary recent advances in quantum information, communication, and computation have involved the ubiquitous use of entropy-related concepts as fundamental tools to monitor and quantify the complex behavior of quantum systems, by themselves as in quantum dynamics and quantum phase-transitions, and in relation to the manipulation of information they can carry. Quantum entropy, relative entropy, mutual information, and their dynamics are at the core of many disciplines. In all these different scenarios, entropy-related concepts stand out as fundamental tools with which to capture the complexity of the processes involved and to harness them to the advantage of increasing the efficiency of protocols, by establishing and reaching their ultimate quantum limits.

Prof. Fabio Benatti
Guest Editor



mdpi.com/si/18698

Special Issue



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)