Special Issue

Combinatorial Aspects of Shannon Theory

Message from the Guest Editors

Combinatorial tools have played a key role in information theory since as early as Shannon's 1948 paper, which used counting techniques to study constrained coding and random coding—an early instance of the probabilistic method—to prove the channel coding theorem. Information theory, in turn, has inspired work in combinatorics, inter alia, through Shannon's work on the zero-error capacity and subsequent work on error-free source-coding and communications. This cross fertilization continued unabatedly over the years and has led to numerous results in both fields. It is the purpose of this Special Issue to explore recent developments at the interface between the two fields. While appreciating the impact that combinatorics has had on code construction, our focus is more on Shannon theory than on coding theory. On the combinatorics side, we seek results where information theory plays a key role either in the formulation or in the solution.

Guest Editors

Prof. Dr. Amos Lapidoth

Dr. Or Ordentlich

Prof. Dr. Ofer Shayevitz

Deadline for manuscript submissions

closed (31 August 2021)

Entropy

an Open Access Journal by MDPI

Impact Factor 2.1
CiteScore 4.9
Indexed in PubMed

mdpi.com/si/66635

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

mdpi.com/journal/entropy

Entropy

an Open Access Journal by MDPI

Impact Factor 2.1
CiteScore 4.9
Indexed in PubMed

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)

MDPI