



entropy



an Open Access Journal by MDPI

Combinatorial Aspects of Shannon Theory

Guest Editors:

Prof. Dr. Amos Lapidoth

Signal and Information
Processing Laboratory, ETH
Zurich, 8092 Zurich, Switzerland

Dr. Or Ordentlich

School of Computer Science and
Engineering, Hebrew University
of Jerusalem, Edmond J. Safra
Campus, Jerusalem 91904, Israel

Prof. Dr. Ofer Shayevitz

Department of Electrical
Engineering Systems, Tel Aviv
University, P.O. box 39040, Tel
Aviv 6997801, Israel

Deadline for manuscript
submissions:

closed (31 August 2021)

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.



mdpi.com/si/66635

Special Issue



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, St. Alban-Anlage 66
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)