



*entropy*



an Open Access Journal by MDPI

## Entropy and Information Inequalities

Guest Editors:

**Dr. James Melbourne**

Department of Mathematical  
Sciences, University of Delaware,  
Newark, DE 19716, USA

**Dr. Varun Jog**

Departments of Electrical &  
Computer Engineering, University  
of Wisconsin, Madison, WI 53706,  
USA

Deadline for manuscript  
submissions:

**closed (30 November 2018)**

### Message from the Guest Editors

In recent decades, information theoretic inequalities have provided an interface with both neighboring and seemingly disparate disciplines. What is more, bridges built from these interactions have produced new and richer understandings of Information theory itself. Important connections have been established between information theoretic inequalities and subjects including, convex geometry, optimal transport, concentration of measure, probability, statistics, estimation theory, additive combinatorics, and thermodynamics, by way of inequalities; entropy power, Brunn–Minkowski, HWI, log-Sobolev, monotonicity in CLT, Sanov, sum-set, Landauer, and many more. Even within information theory, there has been renewed interest in developing inequalities in non-conventional settings such as convolution inequalities for Renyi or Tsallis entropy, inequalities for f-divergences, and entropy inequalities over discrete spaces.

In this Special Issue, we would like to invite contributions that establish novel information theoretic inequalities (broadly defined), extend the applications thereof, and deepen our understanding of information theory and related fields.



[mdpi.com/si/8520](https://mdpi.com/si/8520)

# 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](http://www.mdpi.com)

[mdpi.com/journal/entropy](http://mdpi.com/journal/entropy)  
[entropy@mdpi.com](mailto:entropy@mdpi.com)  
[X@Entropy\\_MDPI](#)