

## Special Issue

# Entropy, Nonlinear Dynamics and Complexity

### Message from the Guest Editor

Concepts such as ‘entropy’ or ‘complexity’ have been approached from many different angles in physics, mathematics, computer science and beyond. The interdisciplinary arena spanned by these concepts inherits ideas and tools from nonlinear dynamics (e.g. Kolmogorov–Sinai entropy, Renyi entropies), information theory (Shannon entropy, statistical complexity), statistical physics (Boltzmann entropy, Tsallis entropy), or network science (graph entropy), and make use of these to describe and understand the behaviour of complex systems in an amazingly wide range of contexts. The aim of this Special Issue is to encourage researchers to present original and recent developments on topics closely related to entropy and complexity that emerge (typically) in nonlinear dynamical systems and related complex systems. The type of contributions can be theoretical or applied: they can address a particular fundamental open problem where the authors push forward the state of the art or can represent sensible examples that make efficient use of these tools in different contexts across physics, biology, economics or the computational social sciences, among others.

---

### Guest Editor

Prof. Dr. Lucas Lacasa  
School of Mathematical Sciences, Queen Mary University of London,  
Mile End, London E1 4NS, UK

---

### Deadline for manuscript submissions

closed (15 December 2019)



## Entropy

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.1  
CiteScore 4.9  
Indexed in PubMed



[mdpi.com/si/24335](https://mdpi.com/si/24335)

*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 2.1  
CiteScore 4.9  
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)