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)



an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



mdpi.com/si/24335

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

mdpi.com/journal/ entropy





an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



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)

