

Topical Collection

Algorithmic Information Dynamics: A Computational Approach to Causality from Cells to Networks

Message from the Collection Editors

Algorithmic information dynamics (AID) is a new type of discrete calculus based on computer programming, employed to study complex systems by exploring the software space of models explaining a system subject to changes or perturbations. The objective is to look for computable mechanistic generating models and first principles, thereby ushering in the next generation of scientific discovery and model-driven machine learning. We encourage authors and researchers to continue exploring how AID can help us to understand new aspects of systems science by building rich causal computational models and submitting their results to this Special Issue. They would thereby be contributing to progress in the methodological aspects of systems science, advancing it beyond its current reliance on simplistic data analysis and ad hoc measures.

Collection Editors

Dr. Hector Zenil

School of Biomedical Engineering and Imaging Sciences, King's College London, London WC2R 2LS, UK

Dr. Felipe S. Abrahão

1. National Laboratory for Scientific Computing (LNCC), Petropolis 25651-075, RJ, Brazil
2. Algorithmic Nature Group, Laboratoire de Recherche Scientifique (LABORES) for the Natural and Digital Sciences, 75005 Paris, France
3. Oxford Immune Algorithmics, Reading RG1 3EU, UK



Entropy

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 4.9
Indexed in PubMed



mdpi.com/si/104240

Entropy
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)