

Special Issue

Information Theory and AI-Driven Communications

Message from the Guest Editors

Whilst information theory (IT)-driven communications have led the evolution of mobile communication systems in the past decades, artificial intelligence (AI)-driven approaches have been demonstrating great potentials in bolstering the future (r)evolutions. However, there is still a lack of theoretical understanding to underpin such a revolutionary thread of integrated IT-/AI-driven communications. This special issue aims to present cutting-edge research of 1) transformations of IT-driven communication frameworks and algorithms to AI-driven architectures and models using e.g., learning-to-code, learning-to-optimize, learning-to-unfold approaches; and 2) theoretical foundations of AI-driven models and algorithms for communications with respect to generalization, robustness, explanation, security and privacy from information and learning theoretical perspectives. In particular, we welcome contributions that investigate innovative model/data-driven deep learning approaches to digital/wireless communications and study theoretical guarantees of AI models/algorithms with respect to generalization, robustness, explainability, security and privacy.

Guest Editors

Prof. Dr. Xinping Yi

National Mobile Communications Research Laboratory, Southeast University, Nanjing, China

Dr. Abdellatif Zaidi

Institut Gaspard Monge, Université Paris-Est, 05 Boulevard Descartes, Cité Descartes, 77454 Champs sur Marne, France

Deadline for manuscript submissions

31 October 2026



Entropy

an Open Access Journal
by MDPI

Impact Factor 2.0
CiteScore 5.2
Indexed in PubMed



mdpi.com/si/246859

Entropy
Editorial Office
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 2.0
CiteScore 5.2
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)