

Special Issue

Finite-Length Information Theory

Message from the Guest Editors

This Special Issue aims at collecting recent results in finite-length information theory and its intersection with neighboring fields. Possible topics include, but are not limited to:

- One-shot information theory and information spectrum methods.
- Nonasymptotic performance bounds for point-to-point and multiterminal communication systems.
- Refined asymptotics: error exponents, dispersion, and moderate deviations analysis.
- Error-correcting codes: design guidelines and performance analysis in the finite-length regime.
- Lossless and lossy data compression at finite blocklengths.
- Delay-constrained joint source-channel coding.
- Exploiting channel feedback in code design to improve complexity–delay–reliability tradeoffs.
- Receiver design: constellation, quantization, and iterative decoding.
- Information theory for the control of dynamical systems.

Guest Editors

Dr. Gonzalo Vazquez-Vilar

Signal Theory and Communications Department, Universidad Carlos III de Madrid, Avenida de la Universidad, 30, 28911 Leganés, Spain

Dr. Victoria Kostina

Electrical Engineering, California Institute of Technology, 1200 E California Blvd, MC 136-93, Pasadena, CA 91125, USA

Deadline for manuscript submissions

closed (15 September 2021)



Entropy

an Open Access Journal
by MDPI

Impact Factor 2.1
CiteScore 4.9
Indexed in PubMed



mdpi.com/si/36150

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)