

Special Issue

Applications of Fisher Information in Sciences II

Message from the Guest Editor

It is well recognized that Ronald A. Fisher originally presented Fisher information in his statistical estimation theory a century ago, and that it has offered an indispensable tool with which to analyze statistical systems. To date, it has also received extensive attention from researchers working in fields beyond statistics. Statistical physics, thermodynamics, and quantum science are, indeed, intimately associated with this measure. In addition, astronomy and biological sciences reap most of the benefits of this tool for big data analysis. The applications of Fisher information are in fact vast, and have played expanding roles in the advancement of each discipline. For example, precise temperature measurement and its development are becoming crucial tasks in modern quantum technologies and the advancement of thermodynamics in the quantum region. In this renewed Special Issue, we would like to compile articles addressing the fundamental aspects of Fisher information and its applications in various fields. We welcome submissions that shed new light on the scope of this information's in-depth features and unreported useful applications.

Guest Editor

Dr. Takuya Yamano

Department of Mathematics and Physics, Faculty of Science, Kanagawa University, 3-27-1 Rokkakubashi, Yokohama 221-8686, Kanagawa, Japan

Deadline for manuscript submissions

closed (21 March 2025)



Entropy

an Open Access Journal
by MDPI

Impact Factor 2.0
CiteScore 5.2
Indexed in PubMed



mdpi.com/si/181998

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)