



entropy



an Open Access Journal by MDPI

Applications of Fisher Information in Sciences II

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)

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.



mdpi.com/si/181998

Special Issue



entropy



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Kevin H. Knuth

Department of Physics, University
at Albany, 1400 Washington
Avenue, Albany, NY 12222, USA

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.

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)

Contact Us

Entropy Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/entropy
entropy@mdpi.com
[X@Entropy_MDPI](#)