



Information Theory and Geosciences

Guest Editors:

Dr. Denisse Pasten

Department of Physics,
Universidad de Chile, Santiago
Las Palmeras 3425, Santiago
8330111, Chile

Prof. Dr. Eugenio E. Vogel

1. Department of Physics,
Universidad de La Frontera,
Temuco Casilla 54-D, Temuco
4811230, Chile
2. Física de la Materia
Condensada y Física Estadística,
Universidad Central de Chile,
Santiago 8330601, Chile

Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editors

The nature that surrounds us is a non-equilibrium system, posing unique challenges to humankind all the time. We have chosen the geosciences for the present volume from a broad scope of manifestations because many aspects are subtle for general mathematical modeling, such as those provided by information theory and its relations to other statistical physics techniques.

Information theory deals with the extraction, processing, and storage of data and connections with other related records. Chains of values bearing valuable information of the reciprocal space, which describes the states available for the system, usually represent these data. It is precisely the logarithm of the “volume” subtended by all these states that leads to the concept of entropy.

We invite you to contribute articles that deal with the natural phenomena affecting our planet Earth, such as space plasmas, solar wind, wind energy, earthquakes, volcanic activity, induced seismicity, ocean dynamics, and several others. These phenomena can be described by entropy, information theory, or related concepts.





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, St. Alban-Anlage 66
4052 Basel, Switzerland

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

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