



entropy



an Open Access Journal by MDPI

Generalized Statistical Thermodynamics II

Guest Editors:

Prof. Dr. Themis Matsoukas

Department of Chemical Engineering, Pennsylvania State University, 313 Chemical and Biomedical Engineering Building, University Park, PA 16802, USA

Prof. Dr. Milton W. Cole

Department of Physics, Penn State University, 104 Davey Lab, University Park, PA 16802, USA

Deadline for manuscript submissions:

closed (31 August 2023)

Message from the Guest Editors

Population balances deal with the evolution of a distributed property, trait, or other characteristic over the members of a population. Numerous examples are covered under this generic description, from colloidal particles and cells at the microscale, to plants and animals at the macroscale, to stars and galaxies at astronomical scales. Stochastic population balances model the evolution of the population as a stochastic process that considers all possible transitions of state at any given moment.

This Special Issue invites papers that apply the tools and formalism of statistical mechanics to the evolution of stochastic populations. Areas of special interest include clustering and fragmentation in particulate systems, propagation and extinction of epidemics, statistical thermodynamics of networks, evolution of biological populations, and generally problems that view the evolution of populations as a random walk in the event space of possible states.



mdpi.com/si/88792

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 \(Web of Science\)](#), [MathSciNet](#), [Inspec](#), [PubMed](#), [PMC](#), [Astrophysics Data System](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Physics, Multidisciplinary*) / CiteScore - Q1 (*Mathematical Physics*)

Contact Us

Entropy
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/entropy
entropy@mdpi.com
[@Entropy_MDPI](https://twitter.com/Entropy_MDPI)