Special Issue

Statistical Methods for Complex Systems

Message from the Guest Editors

A complex system is a large scale framework which consists of many interacting components. Complex systems are intrinsically difficult to analyze and model, due to the involved nature of interactions among their parts. The use of statistical methods to study the behavior of such systems, and to explain their dynamics, has gained a significant amount of attention, both from a theoretical and an empirical viewpoint. In addition, there have been many advances in applying Shannon theory to complex systems, including correlation analysis for spatial and temporal data, the study of entropy and its derivatives, and clustering techniques for complex networks. In this Special Issue we invite contributions that focus on statistical methods for complex systems, with an emphasis on information-theoretic principles.

Guest Editors

Prof. Dr. Irad E. Ben-Gal

 Department of Industrial Engineering, The Iby and Aladar Fleischman Faculty of Engineering, Tel Aviv University, Ramat-Aviv 69978, Israel
Laboratory of Al Business and Data Analytics (LAMBDA), Tel Aviv University, Ramat-Aviv 69978, Israel

Dr. Amichai Painsky

Department of Industrial Engineering, The Iby and Aladar Fleischman Faculty of Engineering, Tel Aviv University, Tel Aviv-Yafo 69978, Israel

Deadline for manuscript submissions

closed (15 August 2022)



an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



mdpi.com/si/41144

Entropy Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 entropy@mdpi.com

mdpi.com/journal/ entropy





an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



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)

