



entropy



an Open Access Journal by MDPI

## Spatiotemporal Prediction and Simulation Methods at the Nexus of Statistical Physics, Spatial Statistics and Machine Learning

Guest Editors:

**Dr. Dionissios T. Hristopoulos**

School of Electrical & Computer Engineering, Technical University of Crete, 73100 Chania, Greece

**Dr. Emmanouil Varouchakis**

School of Mineral Resources Engineering, Technical University of Crete, 73100 Crete, Greece

Deadline for manuscript submissions:

**closed (15 June 2023)**

### Message from the Guest Editors

In a broad sense, data-driven prediction and simulation provide quantitative probabilistic estimates of a physical process (or several interacting processes) at spatial locations and/or times where observations are unavailable, based on existing data. The aim of this Special Issue is to explore inter-disciplinary predictive approaches for spatiotemporal systems which combine ideas from statistical physics, space-time statistics, as well as statistical and machine learning.

Methodological, computational, and application-oriented contributions that advance the state of the art are suitable. Inter-disciplinary studies that lead to improved understanding and modeling flexibility as well as studies that provide enhanced predictive capabilities for space-time processes are also welcome. Application topics of interest include, but are not limited to, hydrological processes, epidemiology, environmental flows, climate, ecological processes, wind and solar energy, and analysis of brain signals.



[mdpi.com/si/101462](https://mdpi.com/si/101462)

# 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](http://www.mdpi.com)

[mdpi.com/journal/entropy](http://mdpi.com/journal/entropy)  
[entropy@mdpi.com](mailto:entropy@mdpi.com)  
[X@Entropy\\_MDPI](#)