# **Special Issue**

## Entropy and Nonlinear Dynamics in Medicine, Health, and Life Sciences

## Message from the Guest Editors

Methods of entropy and nonlinear dynamics have been developed for gaining insight into the predictability, complexity, and uncertainty of systems involving signals and images. Complex systems are those whose behavior is difficult to predict and model, because of the nonlinear dependencies and relationships between their components. Investigations into the underlying behavior and latent patterns of raw complex data, such as time series, multi-channel, and multi-modal images are useful for answering important questions in medicine, physiology, health, and biology, This Special Issue calls for novel applications of entropy and nonlinear dynamics methods that include, but are not limited to, information-theoretical algorithms; chaos; artificial-intelligence-based nonlinear dynamics; and networks applied to complex diseases, radiology, digital pathology, biomarker discovery, cell biology, and mental health.

## **Guest Editors**

Prof. Dr. Tuan D. Pham

Department of Biomedical Engineering, Linkoping University, 58183 Linkoping, Sweden

Prof. Dr. Jean-Marc Girault

- 1. Department of Electronics and Control Engineering, Ecole Supérieure d'Electronique de l'Ouest, 49107 Angers, France
- 2. LAUM UMR CNRS 6613 Le Maine University, 72000 Le Mans, France

#### Deadline for manuscript submissions

closed (30 September 2020)



an Open Access Journal by MDPI

Impact Factor 2.0 CiteScore 5.2 Indexed in PubMed



mdpi.com/si/29152

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)

