



## Information Theory Applied to Physiological Signals

Guest Editors:

**Prof. Dr. Danilo P. Mandic**

Department of Electrical and Electronic Engineering, Imperial College London, London SW7 2AZ, UK

**Prof. Dr. Andrzej Cichocki**

Brain Science Institute, RIKEN, Japan

**Prof. Dr. Chung-Kang Peng**

Rey Institute for Nonlinear Dynamics in Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA 02215, USA

Deadline for manuscript submissions:

**closed (30 September 2017)**

### Message from the Guest Editors

Dear Colleagues,

In this Special Issue, we consider the most widely analysed physiological signals. The application of information theory principles to physiological signals has undoubtedly shed light on the intrinsic dynamics and mechanisms underlying many physiological systems, consequently elucidating interactions that would not have been possible using temporal or spectral analyses alone.

The main goal of this Special Issue is, therefore, to disseminate new and original research based on information theory analyses of physiological signals, in order to assist in both the understanding of physiological phenomena, diagnosis and treatment, and for planning healthcare strategies to prevent the occurrences of certain pathologies. Furthermore, manuscripts summarizing the most recent state-of-the-art of this topic will also be welcome.

Prof. Dr. Danilo P. Mandic

Prof. Dr. Andrzej Cichocki

Prof. Dr. Chung-Kang Peng

*Guest Editors*





*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](#)