Special Issue

Information Dynamics in Brain and Physiological Networks

Message from the Guest Editors

The field of information theory is becoming more and more relevant for the theoretical description and quantitative assessment of the dynamics of the brain and physiological networks, defining concepts, such as those of information generation, storage, transfer, and modification. These concepts are quantified by several information measures (e.g., approximate entropy, conditional entropy, multiscale entropy, transfer entropy, redundancy and synergy, and many others), which are being increasingly used to investigate how physiological dynamics arise from the activity and connectivity of different structural units, and evolve across a variety of physiological states and pathological conditions. This Special Issue focuses on blending theoretical developments in the new emerging field of information dynamics with innovative applications targeted to the analysis of complex brain and physiological networks in health and disease. To favor this multidisciplinary view, contributions are welcome from different fields, ranging from mathematics and physics to biomedical engineering, neuroscience, and physiology.

Guest Editors

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Prof. Dr. Sebastiano Stramaglia

Deadline for manuscript submissions

closed (30 April 2019)

Entropy

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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.

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