Special Issue

Types of Entropies and Divergences with Their Applications

Message from the Guest Editors

Entropy is an important concept in many fields related to communications. The entropy was originally created by Shannon as part of his theory of communication, in which a data communication system is composed of three elements: a source of data, a communication channel, and a receiver. Many types of entropies and divergences are studied in many works. The theory of entropy represents an old topic of many mathematical areas which still remains an attractive research domain with many applications. The research results presented in this Special Issue concern the properties of different types of entropies and divergences, highlight their applications, and promote the exchange of ideas between mathematicians from many parts of the world. Entropies quantify the diversity, uncertainty, and randomness of a system. Many important types of entropies of divergences have applications in statistical mechanics, operators theory, networks theory, quantum information theory, statistics, etc. By example, the concept of the Rényi entropy has been of great importance in statistics, ecology, theoretical computer science, etc.

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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

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