



Information Theoretic Measures and Their Applications

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Message from the Guest Editors

The concept of entropy, an ever-growing physical magnitude that measured the degree of decay of order in a physical system, was introduced by Rudolf Clausius in 1865 through an elegant formulation of the second law of thermodynamics. Seven years later, in 1872, Ludwig Boltzmann proved the famous H -theorem, showing that the quantity H always decreases in time, and in the case of perfect gas in equilibrium, the quantity H was related to Clausius' entropy S . The dynamical approach of Boltzmann, together with the elegant theory of statistical ensembles at equilibrium proposed by Josiah Willard Gibbs, led to the Boltzmann–Gibbs theory of statistical mechanics, which represents one of the most successful theoretical frameworks of physics. In fact, with the introduction of entropy, thermodynamics became a model of theoretical science.

For the present Special Issue, manuscripts focused on any of the abovementioned “*Information Theoretic Measures as Mutual Information, Permutation Entropy Approaches, Sample Entropy, Wavelet Entropy and its Evaluations*”, as well as, its interdisciplinaries applications are more than welcome.





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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.

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