Special Issue

The Statistical Foundations of Entropy

Message from the Guest Editors

The aim of this Special Issue is to encourage researchers to present an original piece of work that could contribute to an ongoing discussion on statistical foundations of entropy with a particular emphasis on non-conventional entropies that go significantly beyond Boltzmann, Gibbs, and Shannon paradigms. Expected contributions should address, on the one-hand, purely conceptual issues ranging from non-equilibrium statistical physics, (quantum) thermodynamics to information and estimation theory, and on the other hand, they should be related to applications, e.g., in complex dynamical systems, micromechanics, networks structures, or stochastic thermodynamics. The main topics include, but are not limited to:

- Generalized entropies
- Non-equilibrium processes
- Generalizations of statistical mechanics
- Quantum systems
- Information-theoretic entropies
- Axiomatic approaches

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Deadline for manuscript submissions

closed (19 May 2021)

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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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