Special Issue

Information Flow and Entropy Production in Biomolecular Networks

Message from the Guest Editors

As an alternative to the concept of information, entropy production and related energy dissipation are also central to phenomenological thermodynamics. It is of great interest to study them for open systems as pioneered by von Bertalanffy and Prigogine and to find principles of optimality for biological processes that allow cells to operate with a limited amount of loss of energy. Applications are widespread from understanding the organization of living systems to planning of biotechnological processes. The main topics of this Special Issue include, but are not limited to, the following: _ The coding, recognition, and prediction of the environment;
_ Channel information capacity and network bottlenecks;
_ Optimal information flow in biomolecular networks;
_ Redundancy and error-correction;
_ Energetic, thermodynamic, and other constraints in information processing;
_ Informational aspects of cell and tissue-level decision making and adaptation;
_ Optimality principles for entropy production;
_ Emerging complexity in biomolecular networks.

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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.

Editor-in-Chief

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