



entropy



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Entropy and Information in Biological Systems

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Deadline for manuscript
submissions:

closed (20 May 2024)

Message from the Guest Editor

In 1943, Erwin Schrödinger proposed that an understanding of the true nature of living systems first requires an apprehension of their ability to control entropy dynamics within their environment. The development of information theory for communications by Claude Shannon was subsequently linked to the concept of entropy. Living organisms utilize and exchange information as a form of biological currency during the process of adapting to their environmental conditions. The mechanics of the flow of information in open living systems have not been deeply explored in the literature and deserve attention. The derivation of biological systems from the information/entropy perspective could provide considerable insights into the functioning and fundamental nature of entropy dynamics and provide a foundation for a comprehensive theoretical biology.



mdpi.com/si/188552

Special Issue



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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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