



Evolution and Thermodynamics

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Message from the Guest Editor

Since Boltzmann's observations in 1886, scientists have continuously revisited the role of thermodynamics in evolution, with significant contributions from Lotka, Schrödinger, Odum, Fenchel, Prigogine and many other eminent thinkers. The field of thermodynamic evolution has greatly advanced in more recent years, bringing together ecological, molecular and physiological sciences. Thermodynamics also forms the hub around which we can understand systems theory within biology, given that it is the science of energetic relationships, flowing through all aspects of life.

Thus, this Special Issue, Evolution and Thermodynamics, is both timely and essential reading for anyone working in the field of biological evolution and in the life sciences more broadly. Bringing together leading experts from around the world, selected for their important contributions across this field over the last thirty years, we explore many of the key advances and issues within this area, while also seeking to integrate recent work within a broader context. This book is at the cutting edge of a rapidly evolving field, written by those who are centrally involved in its ongoing development.





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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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