Special Issue

Biological Statistical Mechanics II

Message from the Guest Editors

'Biological Statistical Mechanics' is strongly linked to the generalization of statistical approach for out-ofequilibrium mesoscopic systems as the background for the extension of thermodynamics for biological systems revealing specific types of criticality responsible for DNA and cell transformation. This implies we must use a sensible approach when transferring established physical concepts into biological realm, thus an 'attractor-like' behavior in cell biology will correspond to a typical gene expression profile over many thousands of genes and can be recognized in terms of Pearson correlation between different samples of the same cell kind while escaping a rigorous mathematical description in terms of differential equations. We are convinced Entropy is the right place to host scientific works that dare to pay a serious attention to biology without considering biological problems only as an occasion for interesting applications of physical concepts.

- complex networks
- non-linear dynamics
- structure and dynamics
- biological evolution
- cell biology, physiology

Guest Editors

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Deadline for manuscript submissions

closed (20 October 2021)



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