

## Special Issue

# Complexity, Entropy and the Physics of Information

### Message from the Guest Editors

Complex network research now involves a large community of interdisciplinary scholars of computer scientists, mathematicians, economists, and especially physicists. This has resulted in a better understanding of complex phenomena—from the work of Barabasi and Albert to the collaboration networks of Newman. In fact, complexity science as a whole has been gaining traction among physicists, and it has found great application within the framework of statistical mechanics, such as in the example of the belief propagation algorithm. Moreover, the rise of a more connected world, such as through the internet, has given rise to many more possibilities to study such complex structures and to model the inner mechanisms backed up by real world data. This makes complexity theory a fertile ground to work on, where one can develop new methods and test new ideas to solve the various problems in complexity and network studies.

This Special Issue focuses on recent advances in complex networks and their applications in computer science, physics, biomedicine, and more.

**Keywords:** complex networks; complexity theory; influence propagation; diffusion model; community structure

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### Deadline for manuscript submissions

closed (31 August 2023)



## Entropy

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Impact Factor 2.0  
CiteScore 5.2  
Indexed in PubMed



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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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### Editor-in-Chief

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