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# Synchronization in Complex Networks of Nonlinear Dynamical Systems

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## **Message from the Guest Editors**

Dear Colleagues,

The mathematical abstraction of networks is a hugely successful tool for describing the structure of complex systems through the relations of their parts. When the parts of a complex system evolve with characteristic intrinsic frequencies, interaction through a network can lead to alterations in frequencies, phases and amplitudes. These effects, broadly studied under the topic of synchronization, are essential for the function, i.e., the global behavior, of complex systems. Recent years have seen a push to generalize networks to non-binary interactions and characterize new effects specific to higher-order interactions. This Special Issue of Entropy aims to present new results on the interplay of network structure and dynamics, with an emphasis on the remaining challenge of transferring and extending these results and techniques to generalized networks.













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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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