

Special Issue

Statistical Physics and Complex Systems

Message from the Guest Editor

Statistical physics deals with systems that are composed of many interacting degrees of freedom. Starting from microscopic models, it can describe and predict emergent behavior at a macroscopic scale. Therefore, it is no surprise that statistical physics has been one of the most effective modeling tools for studying complex systems. Complex systems and phenomena are ubiquitous. They can span multiple length scales from non-trivial topological features in large-scale networks to collective phenomena at the microscopic scale. The salient features of complex systems include numerous interacting parts and the ability to self-organize without centralized control, which often results in properties greater than the sum of its parts. This Special Issue aims to gather articles reflecting the latest developments in the broad area of complex systems and elucidate the discipline's future course. Original research papers with an interdisciplinary focus are particularly encouraged. Authoritative review articles that describe the present state of the art are also welcome.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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