Special Issue

Emergent Phenomena in Quantum Many-Body Systems

Message from the Guest Editors

This Special Issue aims to bring together original research and review articles that explore emergent behavior in quantum many-body systems from both theoretical and experimental perspectives. We encourage submissions that address the following:

Novel quantum phases of matter in symmetry-protected and topological phases.

Dynamics and thermalization in isolated and open quantum systems, including many-body localization and quantum many-body scars.

Experimental developments using cold atoms, superconducting qubits, or trapped ions.

Applications of tensor networks and machine learning in simulating many-body systems.

Guest Editors

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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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