entropy

an Open Access Journal by MDPI

IMPACT FACTOR 2.1

Indexed in: PubMed

CITESCORE 4.9

Entanglement in Quantum Spin Systems

Guest Editor:

Prof. Dr. Leonardo dos Santos Lima
Department of Physics, Federal Education Center Technological of Minas Gerais, Belo Horizonte 30510-000, Brazil

Deadline for manuscript submissions:
30 November 2024

Message from the Guest Editor

In recent years, there has been a surge of interest in unraveling the entanglement properties of quantum spin systems. From the XXZ model with integer and half-integer spin to the Hubbard model and Bose–Hubbard systems, researchers have delved into understanding the intricacies of these systems, including their non-equilibrium behavior. This special issue aims to shed light on the interplay between quantum entanglement and quantum phase transitions in both equilibrium and non-equilibrium quantum spin systems.

We invite researchers to contribute their original research articles, reviews, or theoretical works to this special issue. Potential topics of interest include:

- Entanglement properties in the XXZ, Hubbard, and Bose–Hubbard models
- Exploration of non-equilibrium quantum spin systems
- Influence of spin value and lattice geometry on entanglement characteristics
- Effects of different types of interactions within spin systems
- Quantum and topological phase transitions induced by system couplings
- Analysis of bipartite entanglement near critical points
- Application of entanglement measures in quantum spin systems

entropy

IMPACT FACTOR 2.1 | Indexed in: PubMed | CITESCORE 4.9

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Kevin H. Knuth
Department of Physics, University at Albany, 1400 Washington Avenue, Albany, NY 12222, USA

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.

Entropy is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, PubMed, PMC, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Physics, Multidisciplinary*) / CiteScore - Q1 (Mathematical Physics)

Contact Us

Entropy Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/entropy
entropy@mdpi.com
𝕏@Entropy_MDPI