

Special Issue

Quantum Computing in the NISQ Era

Message from the Guest Editors

This Special Issue will focus on recent theoretical and experimental developments of quantum computing in the NISQ era. This Special Issue will accept unpublished original papers and comprehensive reviews focused on (but not restricted to) the following research areas:

- Design of more efficient variational quantum algorithms;
- Analysis of the performance of hybrid quantum-classical algorithms;
- Theoretical tools for studying the expressivity of ansatz and trainability of variational quantum algorithms;
- Applications of quantum algorithms for chemistry, materials, and other physics problems;
- Applications of quantum algorithms in machine learning, combinatorial problems, and other problems beyond physics;
- Quantum error mitigation;
- Quantum error correction;
- Benchmarking the performance and power of NISQ devices;
- Experimental realization of variational quantum algorithms.

Guest Editors

Dr. Xiao Yuan

Dr. Xiaoming Zhang

Dr. Bálint Koczor

Deadline for manuscript submissions

closed (30 June 2025)



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Entropy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
entropy@mdpi.com

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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.

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.

Editor-in-Chief

Prof. Dr. Kevin H. Knuth

Department of Physics, University at Albany, 1400 Washington Avenue,
Albany, NY 12222, USA

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