

# Special Issue

## Advances in Quantum Computing and Applications

### Message from the Guest Editors

With the field of quantum computing maturing and the increasing discovery of application areas, it is expected that quantum computers will solve specific problems much faster than current and future generations of classical computers. The development of quantum computing hardware has seen significant progress in recent years from gate-based to adiabatic (quantum annealing) and photonic computational models. The first results confirm the feasibility of applying such hardware to real-world situations such as traffic flow optimization, drug discovery, portfolio optimization, encryption, and machine learning. It is important for the research community to highlight current progress in this field and encourage appropriate steps to be taken in the industry, and this Special Issue provides the platform to do so.

### Guest Editors

Prof. Dr. Frank Phillipson

Dr. Sebastian Feld

Dr. Matthias Möller

Ward van der Schoot

Niels Neumann

### Deadline for manuscript submissions

31 July 2025



## Mathematics

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### 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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### Editor-in-Chief

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