

# Special Issue

## Open Quantum Systems

### Message from the Guest Editors

Considering the evolution of systems as unitary is an idealization of reality. In many cases, the system under scrutiny is affected by inevitable interactions with its surroundings. The latter consists of uncontrollable degrees of freedom and is called the environment or bath. How the system evolves under the influence of its environment is studied in the field of open quantum systems and is the subject of this Special Issue. As the physical setups are generic, the field of open quantum systems finds many applications. Matching with the diversity of systems, this Special Issue has a broad scope. Our goal is to cover current trends in the field and their applications in many branches of physics and technology. The issue will gather a number of invited mini-review and we welcome contributions on topics such as the following:

- Strongly correlated systems in open systems
- Non-Markovian quantum open systems
- Dissipation and decoherence in quantum technologies
- Open quantum systems beyond master equations
- Driven quantum open systems
- Open quantum systems in physical chemistry
- Foundations

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### Guest Editors

Prof. Dr. David Zueco

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### Deadline for manuscript submissions

closed (30 September 2021)



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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.

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### Editor-in-Chief

Prof. Dr. Kevin H. Knuth

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