

# Special Issue

## Quantum Nonstationary Systems

### Message from the Guest Editor

Although time-dependent quantum systems have been studied since the very beginning of quantum mechanics, they continue to attract the attention of researchers.

Now we are witnessing a new wave of interest in quantum non-stationary systems in different areas, from cosmology, quantum field theory and elementary particle physics to quantum optics, quantum information theory and condensed matter physics. We invite researchers interested in the areas described above to submit contributions to this Special Issue. Topics of primary interest include (but are not limited to):

- dynamics of quantum systems in the presence of dissipation; decoherence;
- dynamics of quantum entanglement;
- dynamics of quantum circuits and optomechanical systems;
- dynamical Casimir effect and its analogs;
- dynamics of wave packets;
- time-dependent scattering and tunneling;
- quantum speed limits and energy-time uncertainty relations;
- quantum control of evolution;
- quantum effects in nonstationary environments;
- quantum invariants in systems with time-dependent parameters;
- exact and approximate solutions in quantum mechanics with time-dependent parameters

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### Guest Editor

Prof. Dr. Viktor Dodonov

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### Deadline for manuscript submissions

closed (30 June 2023)



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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Kevin H. Knuth

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