



## Towards Ultimate Quantum Theory (UQT)

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### Message from the Guest Editors

Dear Colleagues,

In spite of its tremendous success, the present quantum theory cannot be considered as *the ultimate theory of micro-phenomena*. It suffers from a variety of fundamental problems. Quantum mechanics is a nonrelativistic theory and its relativistic generalization, quantum field theory, suffers of divergences. However, of course, the biggest black cloud in the quantum sky is the impossibility to unify presently-existing quantum theory with general relativity. This Special Issue will be devoted to searching for new ways to create an ultimate quantum theory. However, since this project can take very long time, it also covers all traditional foundational topics: Interpretations, measurement theory, quantum information, entanglement and Bell-type inequalities, mathematical apparatus, experiment and its statistical analysis, quantum versus classical probability and randomness, quantum versus classical random walk, applications of the quantum formalism outside of physics, and especially applications of the principle of complementarity in cognition and decision making.

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*Guest Editors*





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## Message from the Editor-in-Chief

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