

# Special Issue

## Quantum Gravity Condensates

### Message from the Guest Editor

One of the main problems in any background-independent, non-perturbative approach to quantum gravity is the study of the origin and emergence of continuum space-time from microscopic degrees of freedom. Recently, results derived in different fields have provided insights about the possible emergent nature of gravity, supporting the idea of general relativity as the hydrodynamics of pre-geometric space-time building blocks and of space-time as a condensate of these elementary constituents. This Special Issue is intended to collect contributions from scientists working on the fields of quantum gravity and information theory, with the aim to enhance and exploit a cross-fertilization of ideas and techniques of crucial importance towards a quantum description of the gravitational field.

### Guest Editor

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### Deadline for manuscript submissions

closed (31 March 2021)



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### Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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### Editor-in-Chief

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