



Physics and Symmetries of Commutative and Noncommutative Quantum Field Theory

Guest Editor:

Dr. Tajron Jurić

Ruđer Bošković Institute,
Bijenička cesta 54, 10000 Zagreb,
Croatia

Deadline for manuscript
submissions:

closed (15 April 2024)

Message from the Guest Editor

Dear Colleagues,

Quantum field theory (QFT) is a theoretical framework that combines classical field theory and quantum mechanical principles to describe the nature around us. It has been extremely successful in constructing physical models in particle physics (especially the QED and Standard model) and condensed matter physics, and has important implications in quantum aspects of gravity theories. Even though QFT has had much success in explaining phenomenological phenomena, its mathematical rigor (in some aspects) is still a topic of interest and work for many mathematical physicists. Noncommutative geometry and noncommutative QFTs have promising results in explaining the geometry of particle interactions, providing a framework even for quantum aspects of gravity and even lifting the theory to a more rigorous formulation.

This Special Issue will publish contributions on various aspects of commutative and noncommutative QFTs, studying the interplay between them, and their applications in the quantum aspects of spacetime. The articles are expected ...





symmetry



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Sergei D. Odintsov

ICREA, P. Lluis Companys 23,
08010 Barcelona and Institute of
Space Sciences (IEEC-CSIC), C.
Can Magrans s/n, 08193
Barcelona, Spain

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Multidisciplinary Sciences*) / CiteScore - Q1 (*General Mathematics*); Q1 (*Physics and Astronomy*); Q1 (*Computer Science*)

Contact Us

Symmetry Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/symmetry
symmetry@mdpi.com
X@Symmetry_MDPI