





an Open Access Journal by MDPI

Loop Quantum Gravity and Non-Perturbative Approaches to Quantum Cosmology

Guest Editors:

Prof. Dr. Mairi Sakellariadou

Department of Physics, King's College London, London WC2R 2LS. UK

Prof. Dr. Gerald B. Cleaver

Early Universe Cosmology and Strings (EUCOS) Group, Center for Astrophysics, Space Physics and Engineering Research (CASPER), Baylor University, Waco, TX 76798, USA

Prof. Dr. Etera Livine

Ecole Normale Superieure de Lyon, LPENSL, 69342 Lyon, France

Deadline for manuscript submissions:

closed (28 February 2019)

Message from the Guest Editors

Dear Colleagues,

Quantum gravity research is experiencing a strong resurgence. Several approaches to unifying general relativity with quantum mechanics are proving fruitful and enlightening. They offer indications of properties of an underlying (or emerging) quantum gravity and cosmological implications. This special edition of *Universe* is devoted to recent developments in quantum cosmology and quantum gravity, with special focus on loop quantum gravity. All related articles are invited to be submitted for this Special Issue.

Topics of interest for this Special Issue include, but are not limited to:

- quantum geometry, quantum gravity, and cosmological implications
- non-perturbative approach to quantum gravity (e.g., loop quantum gravity, group field theory, spin foam)
- string theory and string cosmology
- modified gravity
- emergent gravity

Webiste: http://www.mdpi.com/journal/universe/special_issues/loop_quantum_gravity_cosmology

Prof. Dr. Mairi Sakellariadou

Prof. Dr. Gerald B. Cleaver

Prof. Dr. Ftera Livine

Guest Editors



mdpi.com/si/14913









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Lorenzo Iorio

Ministero dell' Istruzione e del Merito, Viale Unità di Italia 68, 70125 Bari, Italy

Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

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), Astrophysics Data System, INSPIRE, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (Astronomy and Astrophysics) / CiteScore - Q2 (General Physics and Astronomy)

Contact Us