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IR Quantum Gravity, Theoretical Challenges and Cosmological/Astrophysical Consequences

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Deadline for manuscript
submissions:

closed (31 January 2023)

Message from the Guest Editors

Dear Colleagues,

We invite colleagues to submit contributions to this Special Issue on “IR Quantum Gravity, Theoretical Challenges, and Cosmological/Astrophysical Consequences” of the journal *Universe*, addressing both theoretical and phenomenological aspects concerning:

- IR quantum gravity and non-perturbative functional renormalization group flow;
- IR perturbative corrections to the gravity sector;
- IR and UV scale interconnection;
- IR corrections and cosmological consequences, inflation, large scale structure, dark energy, etc.;
- IR corrections and astrophysical consequences, black holes, supernovae, galactic rotational curves, etc.;
- IR corrections to the gravity sector and gravitational waves;
- UV to IR passage and explanation of decoherence, physical interpretation of the “collapse of the wave function”.

Prof. Dr. Vasilios Zarikas

Prof. Dr. Pantelis S. Apostolopoulos

Guest Editors



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Special Issue



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Editor-in-Chief

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Message from the Editor-in-Chief

The multidisciplinary *Universe* journal 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 editorial board, I extend my welcome to this new journal and look forward to hearing from the interested contributors and learning about their valuable research.

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