Special Issue

Latest Developments in the Quest for the Unification of Cosmic Inflation and Dark Energy

Message from the Guest Editor

Dark energy holds the key to the origin and fate of our Universe. When dominant, dark energy forces the expansion of the Universe to accelerate. Observations confirm that primordial accelerated expansion (inflation) set the stage for the Universe history, but it is also occurring today. Unifying inflation and current dark energy allows for economic treatment in a common theoretical framework. Because dark energy can be accounted for by a potentially dominated scalar field called quintessence, unifying models are called quintessential inflation. The effort to unify inflation with late dark energy is underpinned by the reduction in popularity of the concordance model ΛCDM, due to the "swampland conjectures", as an explanation of late dark energy. Moreover, quintessential inflation may generate a spike in primordial gravitational waves, soon to be observable by LIGO and/or LISA.

Guest Editor

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Galaxies provides an advanced forum for studies related to astronomy, astrophysics, and cosmology, including all of their subfields. Different formats, such as specialized research articles, reviews, communications and technical notes are welcomed. Manuscripts containing original and creative research proposals and ideas are especially appreciated.

We encourage scientists to publish their astronomical observations and theoretical results in as much detail as possible. There is no restriction on the paper length and full experimental and methodological details, as applicable, should be provided. All papers will be peer reviewed promptly. On behalf of the distinguished members of the editorial board, I extend my welcome to all researchers working on these subjects to contribute to *Galaxies*.

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