

Renormalization group approaches to Quantum Gravity and Tensions in Modern Cosmology

Saturday 9 September 2023 12:30 (30 minutes)

Asymptotic Safety is a promising framework towards the understanding, in a non-perturbative way, of Quantum Gravity. It treats the Newtons constant G_N and the cosmological constant Λ as running coupling of an effective action. At the phenomenological point of view the values of G_n and Λ depend on the energy density of the system under consideration. This fact has interesting astrophysical and cosmological consequences. The present work discusses the effects on the distance measurements from SNIa light curves and on the strong and weak gravitational lensing measurements.

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