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Dilaton Quantum Gravity

Monday, 25 July 2022 17:20 (1h 15m)

In this presentation, I will talk about asymptotically safe dilaton gravity. To that end we solve the coupled set of flow equations for the field dependent Newton constant $F(\phi)$, cosmological constant or dilaton potential $V(\phi)$ and dilaton wave function $K(\phi)$, including the physical vanishing cutoff scale. At vanishing dilaton field we recover classical general relativity, while we approach an asymptotically safe regime for large field amplitudes. In addition, the dilaton potential at physical vanishing cutoff scale is essential for the study of the slow-roll-inflation scenario.

Presenter: KOGIOS, Athanasios**Session Classification:** Poster