ERG 2022



Contribution ID: 53

Type: not specified

Nonvanishing gravitational contribution to matter beta functions for vanishing regulators

Wednesday, 27 July 2022 16:55 (20 minutes)

In this talk, I will explore the effect of quantum gravity on matter couplings within a Renormalization Group framework. In particular, I will focus on results obtained from a class of interpolating regulators that allow us to extract certain universal pieces from non-universal quantities. I will discuss an explicit example of how misleading conclusions can be drawn by analyzing the gravitational contributions to beta functions instead of analyzing universal quantities, such as critical exponents, that can be extracted from the beta functions. This could be key to explaining the differences between perturbative studies and Functional Renormalization Group studies.

Presenter: DE BRITO, Gustavo