Contribution ID: 188

Type: Talk

Thermodynamics of f(R) Theories

Thursday 10 September 2020 12:24 (6 minutes)

This work starts from a toy model for inflation in a class of modified theories of gravity in the metric formalism. Instead of the standard procedure – assuming a non-linear Lagrangian f(R) in the Jordan frame – we start from a simple ϕ^2 potential in the Einstein frame and investigate the corresponding f(R) in the former picture. The addition of an ad-hoc Cosmological Constant in the Einstein frame leads to a thermodynamical interpretation of this physical system, which allows further insight on its (meta)stability and evolution.

Author: JORÁS, Sergio (Universidade Federal do Rio de Janeiro –UFRJ)

Presenter: JORÁS, Sergio (Universidade Federal do Rio de Janeiro – UFRJ)

Session Classification: DENSE MATTER, QCD, QFT, HIC, GWs, NSs, DM, COSMOLOGY , FTH-INFLATION