

Cosmological tension analyses in extended theories of gravity: artificial neutral path

Thursday 8 September 2022 12:10 (20 minutes)

The current cosmological probes have provided an extraordinary confirmation of the standard LCDM cosmological model, that has been constrained with unprecedented accuracy. However, with the increase of the experimental sensitivity a few statistically significant tensions between different independent cosmological datasets emerged. While these tensions can be in portion the result of systematic errors, the persistence after several years of accurate analysis strongly hints at cracks in the standard cosmological scenario and the need for new physics. In this talk I will list a few interesting new cosmological models in the direction of extended theories of gravity that could solve this tension and discuss how the new computational techniques will be crucial in this role.

Presenter: Prof. ESCAMILLA-RIVERA, Celia (Nuclear Institute of Science (Instituto de Ciencias Nucleares). Universidad Autonoma de Mexico. ICN-UNAM)