Type: Talk

Weak Gravity from Horndeski Theories

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Modifications of General Relativity have been widely studied to alleviate cosmological tensions. Most of these models lead to an effective strengthening of gravity and enhanced growth. However, the S8 tension —arising from weak-lensing observations that suggest less structure formation than predicted by Λ CDM —points to a different scenario. In this talk, we will investigate stable subclasses of scalar-tensor theories that effectively weaken gravity. Starting from the stable parameterisation of linear Horndeski theory we explore possibilities to suppress the linear growth of structure at late times and compare it to current observational constraints for Modified Gravity.

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