ID de Contribution: 24 Type: Non spécifié

Suppressing the Growth of Structure with Modified Gravity Theories

mardi 10 juin 2025 10:20 (20 minutes)

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 ΛCDM —points to a different scenario. In this talk, we investigate stable subclasses of scalar-tensor theories that effectively weaken gravity. We demonstrate how the suppression of linear structure growth constrains phenomenological modified-gravity parameters. Finally, we compare these weak-gravity models to current data from Stage-IV surveys.

Orateur: THUMMEL, Linus (University of Edinburgh)
Classification de Session: COLOURS Workshop