

Testing gravity with DESI and supernovae correlations

Thursday 6 February 2025 11:00 (20 minutes)

Correlations between new large-scale structure and transient surveys allow us to perform novel tests of gravitational physics. Peculiar velocities create magnitude fluctuations in transient sources. In this talk I will present correlation measurements using data from the Dark Energy Spectroscopic Instrument and Pantheon+ supernovae magnitudes along with matched simulations. By fitting cosmological models to the results we perform measurements of the local growth rate of structure. We compare these measurements to the predictions of the standard cosmological model and present forecasts for future surveys.

Author: NGUYEN, Andrew (Swinburne University of Technology)

Presenter: NGUYEN, Andrew (Swinburne University of Technology)

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