



Contribution ID: 538

Type: **not specified**

Cosmological Stasis and the Growth of Density Perturbations

Wednesday 15 May 2024 16:15 (15 minutes)

Cosmological stasis is a phenomenon in which multiple energy components in the universe (such as matter, radiation, or vacuum energy) maintain constant abundances despite cosmological expansion. Such epochs have recently been shown to arise naturally in cosmologies associated with numerous extensions of the Standard Model, and can persist across many e -folds of expansion. In this talk, I describe how the evolution of perturbations in the matter and radiation densities is affected by the presence of a matter/radiation stasis epoch within the cosmological timeline. I also discuss the resulting implications for structure on small scales.

Mini Symposia (Invited Talks Only)

Primary author: Ms PAULSEN, Anna (Lafayette College)

Co-authors: Prof. THOMAS, Brooks (Lafayette College); Dr HUANG, Fei (Weizmann Institute); Prof. DIENES, Keith (University of Arizona); Dr HEURTIER, Lucien (King's College London); Prof. TAIT, Timothy (University of California Irvine)

Presenter: Ms PAULSEN, Anna (Lafayette College)

Session Classification: Cosmology & Dark Energy

Track Classification: Cosmology & Dark Energy