Contribution ID: **85** Type: **Parallel session talk**

Dynamics of Inspiraling Dark Energy

Thursday, 27 June 2024 16:30 (15 minutes)

We investigate the dynamics of a multifield dark energy model, which arises from certain rapid-turning and inspiraling trajectories in field space. We find the speed of sound of the dark energy perturbations around the background and show that this speed is monotonically decreasing with time. Furthermore, it has a positive-definite lower bound that implies a certain clustering scale. We also extend the previously known background solution for dark energy to an exact solution that includes matter. This allows us to address the implications of our model for the Hubble and σ_8 tensions. The latter are important observational puzzles that motivate the study of cosmological models beyond Λ CDM.

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Session Classification: Parallel session