



Disentangling redshift-space distortions and nonlinear bias using large scale structure dynamics (15' + 5')

Friday 5 August 2016 10:25 (20 minutes)

The distortion of clustering due to the peculiar motions of galaxies and the apparent scale of characteristic features in the galaxy distribution are key tests of cosmic acceleration. I will discuss some of the current challenges in modeling redshift space distortions in large scale clustering statistics, at the percent level required by future galaxy redshift surveys. This will require us to re-consider the scales at which linear perturbation theory is applicable, the impact of stochasticity on defining a linear growth rate and nonlinear velocity-density correlations. I will present a new approach using the information content along different lines of sight to isolate the impact of nonlinear growth and redshift space distortions.

Author: JENNINGS, Elise

Co-author: WECHSLER, Risa (Stanford University / SLAC)

Presenter: JENNINGS, Elise

Session Classification: Astro-particle Physics and Cosmology

Track Classification: Astro-particle Physics and Cosmology