## Cosmology 2018 in Dubrovnik



Contribution ID: 31

Type: not specified

## On the streaming model for redshift-space distortions

Thursday 25 October 2018 18:00 (30 minutes)

Peculiar velocities affects the redshifts of distant galaxies and introduces distortions in all statistical measures of the reconstructed large-scale structure. These distortions can be used to constrain the gravitational theory through clustering statistics. In this talk, we introduce the generalised hyperbolic distribution (GHD) to model the line-of-sight pairwise velocity distribution. We showcase the fidelity of the GHD streaming model by comparing against N-body simulations. With the phenomenological model we have introduced, it paves a way in which the redshift-space correlation function could be utilised to precisely test theories of gravity and interacting dark-energy models for future galaxy surveys like EUCLID.

Presenter: KURUVILLA, Joseph

Session Classification: Afternoon session