

Abstract Submitted
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Galaxy Cluster Cosmology with DES Y1 Data YUANYUAN ZHANG, Fermilab — Constraining LambdaCDM cosmology with galaxy cluster abundance is one of the fundamental goals of the Dark Energy Survey (DES). Many thousands of clusters out to redshift 0.65 have been identified in DES data. We carry out weak-lensing and multi-wavelength studies to constrain the masses of clusters and provide input for cosmology analysis. A cosmology pipeline that considers various systematic effects such as cluster projections and mis-centering is used to derive constraints on LambdaCDM cosmology parameters. This presentation will discuss DES galaxy cluster cosmology analyses based on data collected in the first year.

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