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Clustering Analysis of Lyman Alpha Emitters in the COSMOS Field at z=3.1 and z=4.5 BARBARA BENDA, ERIC GAWISER, RAMEEN FAROOQ, Rutgers University, SHREYA KARTHIKEYAN, University of Maryland, ADAM BROUSSARD, Rutgers University, ARJUN DEY, NOIRLab, KYOUNG-SOO LEE, Purdue University, DUSTIN LANG, Perimeter Institute, BYEONGHA MOON, Korea Astronomy and Space Science Institute, CHANGBOM PARK, Korea Instotute for Advanced Study, VANDANA RAMAKRISHNAN, Purdue University, FRANK VALDES, NOIRLab, YUJIN YANG, Korea Astronomy and Space Science Institute, ODIN COLLABORATION — Lyman alpha emitting galaxies (LAEs) are a useful tool for tracking galaxy evolution. Since the Lyman alpha (Ly) emission line is easily quenched by dust, galaxies detected via this line are nearly dust-free. LAEs are young galaxies in an early burst of star formation that track large scale structure in the distant universe. The One-hundred square-degree DECam Imaging in Narrowbands (ODIN) survey is collecting narrowband images of seven different fields with three filters that correspond to the Ly line at certain redshifts. Combined with publicly available broadband images, this allows for color selection of LAEs. We use LAE catalogs at z=3.1 and z=4.5 to study spatial clustering of LAEs in the COSMOS field. We measure angular correlation functions for each LAE sample and fit them with a power law minus integral constraint model. We calculate the expected redshift distribution from the LAE luminosity function at the appropriate redshifts and the measured filter bandpass. Using the expected redshift distributions, we will forward-model the predicted dark matter correlations to infer the LAE bias values on large-scales.

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