Abstract Submitted
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DESI and other Dark Energy experiments in the era of neutrino mass measurements PATRICK MCDONALD, ANDREU FONT-RIBERA, NICK MOSTEK, BETH REID, Lawrence Berkeley Natl Lab, HEE-JONG SEO, Ohio State University, ANŽE SLOSAR, Brookhaven National Laboratory — We present projections for future cosmological parameter measurements, including neutrino masses, Dark Energy, curvature, modified gravity, the inflationary perturbation spectrum, non-Gaussianity, and dark radiation. We focus on DESI and generally redshift surveys (BOSS, HETDEX, eBOSS, Euclid, and WFIRST), but also include CMB (Planck) and weak gravitational lensing (DES and LSST) constraints. The goal is to present a consistent set of projections, for concrete experiments, which are otherwise scattered throughout many papers and proposals. We include neutrino mass as a free parameter in most projections, as it will inevitably be relevant – DESI and other experiments can measure the sum of neutrino masses to ~ 0.02 eV or better, while the minimum possible sum is ~ 0.06 eV.

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