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**Cosmic Shear Measurements with the Dark Energy Survey Science Verification Data** MATTHEW BECKER, Stanford Univ, MICHAEL TROXEL, University of Manchester, TIM EIFLER, NASA/JPL, NIALL MACCRANN, University of Manchester, DARK ENERGY SURVEY COLLABORATION — We present the first cosmic shear measurements with the Dark Energy Survey Science Verification data, approximately 160 square degrees of four band, multiepoch imaging. We use two independent shear measurement pipelines developed for this data to perform a large suite null tests of the cosmic shear signal, test for the presence of B-modes and search for instrumental contamination in the shear measurements. Combined with a suite of 126 ray traced weak lensing simulations, we are able to calibrate the covariance matrix of the cosmic shear measurements for the final likelihood analysis.

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