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Abstract for an Invited Paper  
for the APR16 Meeting of  
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**Probing the large scale structure with the Dark Energy Survey**

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I will present the latest cosmological results from the Dark Energy Survey (DES), a 5000 square degree optical galaxy survey in the Southern Hemisphere started in 2012. I will focus on the constraints on Baryon Acoustic Oscillations and other cosmological parameters obtained with galaxy clustering measurements from the first years of DES data. I will highlight the various tests and methods that make these results not only precise but also robust against observational systematics and modeling uncertainties. Finally, I will describe the future phases of the survey, the expected increase in constraining power, and the challenges that need to be addressed to fully exploit the data from surveys such as DES and LSST.