

# New results from SDSS-III BOSS: cosmic expansion and growth of structure

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The SDSS-III Baryon Oscillation Spectroscopic Survey, now 90% complete, is measuring the three-dimensional cosmic structure with 1.35 million new redshifts. Galaxy clustering measurements provide constraints on the cosmic expansion history through the baryon acoustic oscillation feature. In addition, the imprint of galaxy peculiar velocities on the observed galaxy clustering, “redshift-space distortions”, provide a measurement of the growth rate of matter perturbations. Taken together, these measurements provide excellent constraints on dark energy and test the relation between expansion history and growth of perturbations expected in General Relativity. I will present an update from BOSS in the context of other recent results such as Planck.

## APS member ID

none

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