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Title:	Dark energy equation of state parameter and its evolution at low redshift
Authors:	Tripathi, A. (/jspui/browse?type=author&value=Tripathi%2C+A) Sangwan, A. (/jspui/browse?type=author&value=Sangwan%2C+A.) Jassal, H.K. (/jspui/browse?type=author&value=Jassal%2C+H.K.)
Keywords:	baryon acoustic oscillations Dark energy theory supernova type Ia - standard candles
Issue Date:	2017
Publisher:	Institute of Physics Publishing
Abstract:	In this paper, we constrain dark energy models using a compendium of observations at low redshifts. We consider the dark energy as a barotropic fluid, with the equation of state a constant as well the case where dark energy equation of state is a function of time. The observations considered here are Supernova Type Ia data, Baryonic Acoustic Oscillation data and Hubble parameter measurements. We compare constraints obtained from these data and also do a combined analysis. The combined observational constraints put strong limits on variation of dark energy energy density with redshift. For varying dark energy models, the range of parameters preferred by the supernova type Ia data is in tension with the other low redshift distance measurements.
URI:	https://iopscience.iop.org/article/10.1088/1475-7516/2017/06/012 (https://iopscience.iop.org/article/10.1088/1475-7516/2017/06/012) http://hdl.handle.net/123456789/1976 (http://hdl.handle.net/123456789/1976)
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