

$Om(z)$ is perfectly consistent with Λ CDM for different data sets.

For the comparison of different data sets and different parametrizations, we summarize the minimum value of χ^2 in Table I. From Table I, we observe the reliability of parametrizations when using different data sets. Comparing two different parametrizations, we see that both of them can fit well of the data, while the CPL model is a little better than the Wetterich parametrization for the Csta SNIa and the combination of Csta SNIa with BAO data.

TABLE I: The minimum value of χ^2 for different combinations of data sets and models.

Data	CPL (χ^2/DOF)	Wetterich
Csta	462.06/394	466.33/394
Csta+BaoR	462.43/395	467.62/395
Csta+Bao2	462.45/394	467.73/394
Csta+BaoZ	462.10/394	466.60/394
Csta+Bao4	464.11/396	468.57/396
Csta+Bao4+WMAP5	468.73/399	468.69/399
Sdss2	227.55/285	227.09/285
Sdss2+BaoR	229.77/286	229.45/286
Sdss2+Bao2	229.93/285	229.65/285
Sdss2+BaoZ	228.77/285	228.57/285
Sdss2+Bao4	231.15/287	231.02/287
Sdss2+Bao4+WMAP5	231.71/290	231.94/290

IV. CONCLUSION

To summarize, we have examined the influence of the systematics in different data sets in SNIa and BAO on the fitting results of the CPL parametrization. We found that the tension observed in [11] between low z (Csta+BaoR) and the high z (CMB) data is not a general behavior. By using SNIa with other templates and other BAO data sets, the incompatibility of the CPL parametrization will disappear. This result supports the speculation that the systematics in the data sets can affect the fitting results and leads to different evolution of the DE model [11]. However this answer is still not definite. The different evolutions in $Om(z)$