Probing Dark Energy:

combining SNe and the CMB

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Dark Energy from SNe Ia: Toward the realistic assumptions...

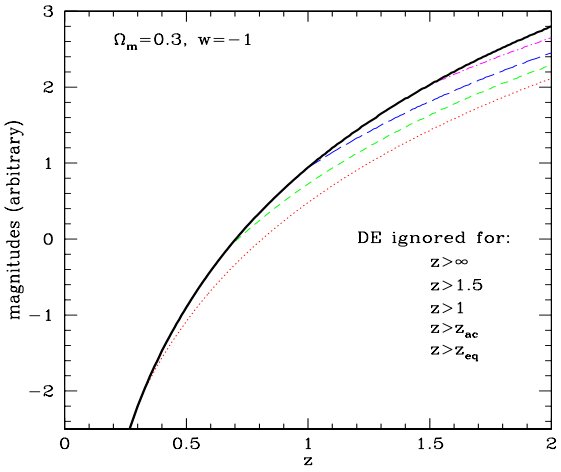
- dark energy remains important out to $z \approx 2$
- possibility that w is time-varying.

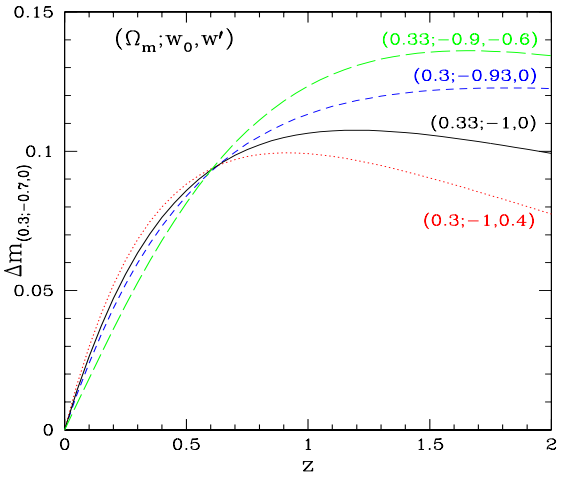
  E.g., $w(z) = w_0 + w_1 z$
- presence of a systematic error:

$$\sigma = \sqrt{0.02^2 + \frac{0.15^2}{N_i}} \text{ magnitudes}$$

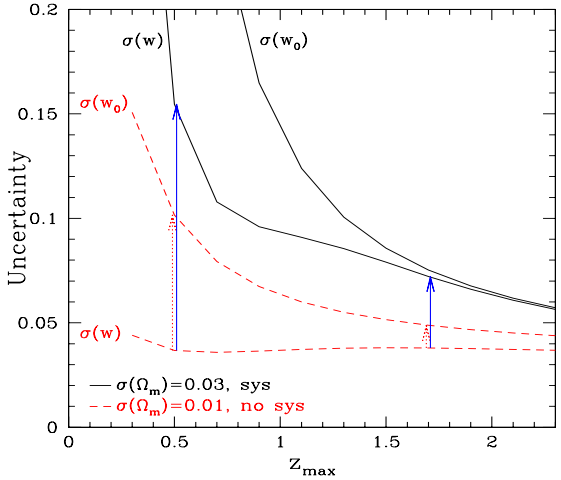
- realistic CMB/LSS priors

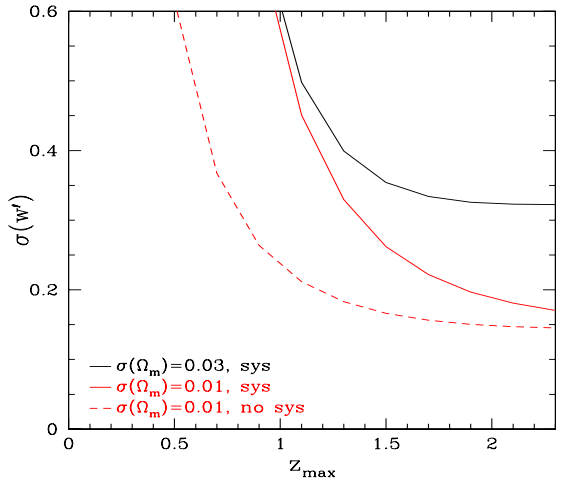
Importance of SNe at high redshift





Including the systematics and evolving w





SNe+CMB Complementarity