

SNAP SAT

supernova acceleration probe
controls for systematics

Dust and Extinction

Determine individual extinctions laws for a given supernova, using range of color measurements into near IR.

Determine gray dust contribution (if any), tracking $d_L(z)$ to high z .

SN Progenitor Age and Metallicity Effects

Studies of lightcurve-timescale (and spectral) luminosity indicators with significant sample of SNe in all host galaxy environments.

Measurement Systematics

Observe all SNe at all redshifts with single, calibrated, stable photometry/spectroscopy system.

(Avoid multiple instruments with different atmospheric/moon conditions.)