

Abstract Submitted
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Bolometric Spectra and Lightcurves of Type Ia Supernovae

MICHAEL SMITKA, Texas A&M Department of Physics and Astronomy, TEXAS A&M SUPERNOVA GROUP TEAM, CARNEGIE SUPERNOVA PROJECT COLLABORATION — The use of Type Ia supernova as distance indicators in the optical revolutionized cosmology by revealing the accelerating universe and are widely viewed as a valuable tool in efforts to distinguish between differing cosmological models. I will discuss our work observing nearby ($z < 0.015$) SNe Ia in the ultraviolet, optical and near-infrared and our method of combining these observations into bolometric spectra and lightcurves to gain a full-spectrum view of rest-frame SNe Ia evolution. I will highlight the importance of this data set with regard to our basic understanding of the underlying physics of SNe Ia and also its utility in analyzing SNe found at higher redshifts by large surveys like Dark Energy Survey and LSST.

Michael Smitka
Texas A&M Department of Physics and Astronomy

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