

## X66a SN 2025wny at $z = 2$ , the first strongly lensed superluminous supernova

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We present imaging and spectroscopic observations of supernova SN 2025wny (“Winny”), associated with the gravitational lens PS1 J0716+3821. Photometric monitoring confirms multiple point-like images, consistent with SN Winny being strongly lensed by two foreground galaxies. Optical spectroscopy of the brightest image allows us to determine the redshift to be  $z_s = 2.008 \pm 0.001$ , based on narrow absorption lines originating in the interstellar medium of the supernova host galaxy. At this redshift, the spectra of SN Winny are consistent with those of Type I superluminous supernovae. We find a high ejecta temperature and depressed spectral lines compared to other similar objects. SN Winny represents the first confirmed galaxy-scale strongly lensed supernova with time delays likely in the range of days to weeks, as judged from the image separations. This makes SN Winny suitable for time-delay cosmography, offering a promising new system for independent measurements of the Hubble constant.