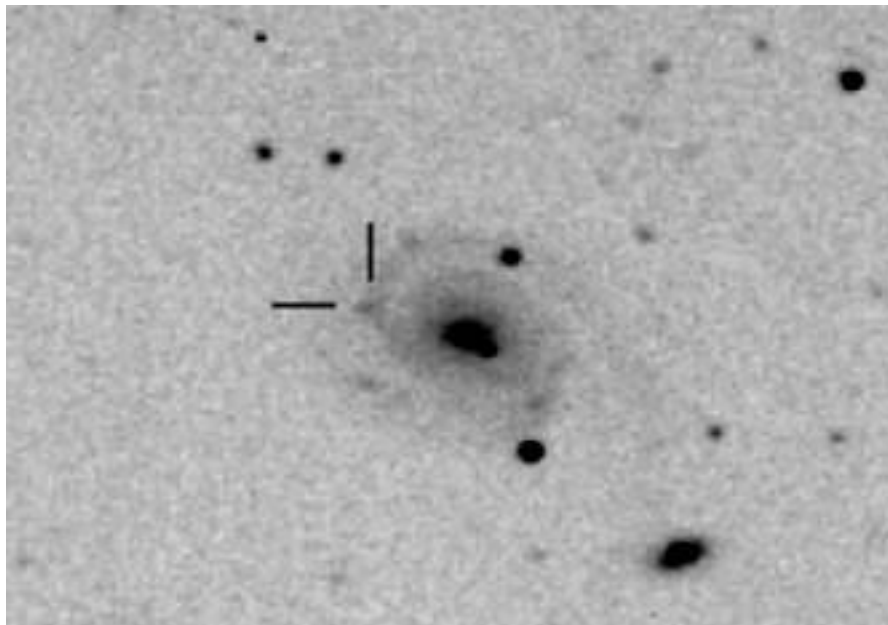


[SN J23470787+2929115](#) (A.R. 23 47 07.78 Dec. +29 29 09.4) scoperta il 25 gennaio 2013 nella galassia NGC 7753 (offset 43E 9N), magnitudine 17.0.

SN scoperta da Zhijian Xu(Nanjing,Jiangsu,China) and Xing Gao (Urumqi,Xinjiang,China) il 25.5804 gennaio e indipendentemente da A. Dimai con il telescopio "Maioni" (SC 0.28 m - f/6,3) dell'Osservatorio del Col Drusciè il 25.7299 di gennaio.

Classificazione (Jan. 30.77 UT - 1.82-m Copernico Telescope in Asiago + AFOSC; range 340-820 nm, resolution 1.3 nm): tipo Ia circa 10 giorni prima del massimo (*L. Tomasella, S. Benetti, E. Cappellaro, A. Pastorello, M. Turatto, P. Ochner*) - [ATEL 4776](#)



**PSN J23470787+2929115 in NGC7753  
2013, January 25.7299 - Col Drusciè Obs.  
Italian Supernovae Search Project-CROSS**

Electronic Telegram No. 3401

Central Bureau for Astronomical Telegrams  
INTERNATIONAL ASTRONOMICAL UNION  
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Prepared using the Tamkin Foundation Computer Network

SUPERNOVA 2013Q IN NGC 7753 = PSN J23470787+2929115

[Editor's note: this text replaces that on CBET 3400 (offset).]

Zhijian Xu, Nanjing, Jiangsu, China; and Xing Gao, Urumqi, Xinjiang, China, report the discovery of an apparent supernova (mag approximately 17.5) on a 40-s unfiltered CCD survey image (limiting mag about 18.0) taken by Xing Gao in the course of the Xingming Sky Survey around Jan. 25.580 UT with a Celestron C14 Schmidt-Cassegrain telescope at Mt. Nanshan. The new object is approximately located at R.A. = 23h47m07s.87, Decl. = +29d29'11".5 (equinox 2000.0), which is about 34".3 east and 11".3 north of the center of NGC 7753. Nothing is visible at this position on a Digitized Sky Survey image from 1991 Oct. 1 (limiting mag about 19.5; no bandpass provided). The discoverers have posted images at website URL <http://www.xjtp.com/XOSS/XM57ZX/XM57ZX.htm>. The variable was designated PSN J23470787+2929115 when it was posted at the Central Bureau's TOCP webpage and is here designated SN 2013Q based on the spectroscopic confirmation reported below. Additional unfiltered CCD magnitudes for 2013Q: 2012 Dec. 9, [19.0 (Xu and Gao); 2013 Jan. 19, [18.0 (Xu and Gao); 20, [17.8 (Xu and Gao); 25.730, 17.0 (Alessandro Dimai, Cortina d'Ampezzo, Italy; independent discovery, reported after posting by Xu and Gao on the TOCP; 0.28-m f/6.3 telescope; position end figures 07s.78, 09".4; offset 43" east, 9" north of nucleus of galaxy NGC 7753; limiting mag about 18.0); 26.077, 17.3 (R. A. Koff, Bennett, CO, USA; Meade 0.25-m f/10 reflector + Apogee U-47 camera; nearly-full moon; limiting mag 19.3; position end figures 07s.79, 11".6; UCAC3 reference stars); 27.567, 16.8 (Xu and Gao; image posted at URL <http://www.flickr.com/photos/75341417@N06/8419303021/in/photostream>); 28.088, 16.5 (L. Elenin, Lyubertsy, Russia; and I. Molotov, Moscow, Russia; images taken remotely with a 0.45-m f/2.8 telescope at the ISON-NM Observatory near Mayhill, NM, USA; position end figures 07s.71 +/- 0".08, 12".0 +/- 0".07; UCAC-4 reference stars; image posted at website URL <http://spaceobs.org/images/TOCP/PSNJ23470787+2929115-20130128.png>); Feb. 2.575, 15.6 (Xu and Gao). Xu and Gao's image from Feb. 2 is posted at URL <http://www.flickr.com/photos/75341417@N06/8441291400/in/photostream>.

L. Tomasella, S. Benetti, E. Cappellaro, A. Pastorello, M. Turatto, and P. Ochner, Osservatorio Astronomico di Padova, Istituto Nazionale di Astrofisica, report that optical spectroscopy (range 340-820 nm; resolution 1.3 nm), obtained on Jan. 30.77 UT with the Asiago 1.82-m Copernico Telescope (+ AFOSC; range 350-820 nm, resolution 1.3 nm), indicates that PSN J23470787+2929115 = SN 2013Q is a type-Ia supernova about ten days before

maximum light at redshift  $z = 0.017239$  (Rhee and van Albada 1996, A.Ap. Suppl. 115, 407; via NED). The expansion velocity, deduced from the Si II 635.5-nm absorption, is about 14000 km/s. The Asiago classification spectra are posted at website URL <http://graspa.oapd.inaf.it>; classification was made via GELATO (Harutyunyan et al. 2008, A.Ap. 488, 383) and SNID (Blondin and Tonry 2007, Ap.J. 666, 1024).

NOTE: These 'Central Bureau Electronic Telegrams' are sometimes superseded by text appearing later in the printed IAU Circulars.

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