

SN 2014bn (A.R., 21 15 13.30 Dec. +02 11 22.4), scoperta il 8 giugno 2014 nella galassia IC 1370 (offset 14W 8S), magnitudine 17.6, tipo: Ia ([ATEL 6214](#))

SN individuata da F. Ciabattari, E. Mazzoni and G. Petroni con il telescopio Newton da 50cm dell'Osservatorio di Monte Agliale (Lucca).



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Prepared using the Tamkin Foundation Computer Network SUPERNOVA 2014bn IN IC 1370 = PSN J21151330+0211224 F. Ciabattari, E. Mazzoni, and G. Petroni, Borgo a Mozzano, Italy, report their discovery of an apparent supernova (mag 17.6) on unfiltered CCD images (limiting magnitude 19.5) obtained on June 8.04 and 8.97 UT with a 0.5-m Newtonian telescope (+ FLI4710 Proline camera). The new object is located at R.A. = 21h15m13s.30, Decl. = +2d11'22".4 (equinox 2000.0; astrometry with respect to UCAC-2 stars), which is 14" west and 8" south of the center of the galaxy IC 1370. Nothing is visible at this position on the digitized plates of the Palomar Sky Survey from 1989 Sept. 18 (F plate; limiting mag 20.3) and 1990 July 23 (J plate; limiting magnitude 20.3). The variable was designated PSN J21151330+0211224 when it was posted at the Central Bureau's TOCP webpage and is here designated SN 2014bn based on the spectroscopic confirmation reported below. Additional unfiltered CCD magnitudes for 2014bn: June 9.021, 17.5 (G. Masi; remotely using a 43-cm telescope at Ceccano, Italy; position end figures 13s.27, 22".4); 9.035, 18.2 (F. Luppi and L. Buzzi, Varese, Italy; 0.38-m f/6.8 reflector; position end figures 13s.26, 22".6; image posted at website URL

http://www.astrogeo.va.it/pub/TOCP/PSN_I1370.jpg

). L. Tomasella, S. Benetti, A. Pastorello, E. Cappellaro, N. Elias-Rosa, P. Ochner, and M. Turatto report that an optical spectrogram of PSN J21151330+0211224 = SN 2014bn (range 340-820 nm; resolution 1.3 nm), obtained on June 9.01 UT with the Asiago 182-cm Copernico Telescope (+ AFOSC) under the Asiago Transient Classification Program (Tomasella et al. 2014, posted at URL

<http://arxiv.org/abs/1403.7233>

), shows that 2014bn is a normal type-Ia supernova. Adopting for the host galaxy (IC 1370) a redshift $z = 0.050$ (Huchra et al. 1999, Ap.J. Suppl. 121, 28; via NED), a good match is found with several normal type-Ia supernovae a few days before B-band maximum light. An expansion velocity of about 11900 km/s is derived from the minimum of the Si II 635-nm line. The Asiago classification spectrum is posted at website URL

<http://sngroup.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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