

**SN 2014bb** (A.R., 13 32 49.11 Dec. +41 52 15.1), scoperta il 9 maggio 2014 nella galassia ngc 5214 (offset 4E 4S), magnitudine 16.5, tipo: Ia ( [ATEL 6140](#) )

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



> Electronic Telegram No. > 3875 > Central Bureau for  
Astronomical Telegrams > INTERNATIONAL ASTRONOMICAL UNION > CBAT Director:  
Daniel W. E. Green; Hoffman Lab 209; Harvard University; > 20 Oxford St.; Cambridge, MA  
02138; U.S.A. > e-mail: [cbatiau@eps.harvard.edu](mailto:cbatiau@eps.harvard.edu) (alternate [cbat@iau.org](mailto:cbat@iau.org)) > URL [http://www  
w.cbateps.harvard.edu/index.html](http://www.cbateps.harvard.edu/index.html)  
> Prepared using the Tamkin Foundation Computer Network > > > SUPERNOVA 2014bb IN  
NGC 5214 = PSN J13324911+4152151 > F. Ciabattari, E. Mazzoni, and M. Rossi, Borgo a  
Mozzano, Italy, report > the discovery of an apparent supernova (mag 16.5) on unfiltered CCD  
images > (limiting magnitude 19.5) obtained on May 9.06 and 9.83 UT with a 0.5-m >  
Newtonian telescope (+ FLI 4710 Proline camera). The new object is located > at > R.A. =  
13h32m49s.11, Decl. = +41d52'15".1 (equinox 2000.0; astrometry with > respect to UCAC-2  
stars), which is 4" east and 4" south of the center of the > galaxy NGC 5214. Nothing is visible

at this position on digitized Palomar > Sky > Survey plates from 1996 Mar. 21 (J plate; limiting magnitude 20.3) and 1997 > Apr. 11 (F plate; limiting magnitude 20.3). The variable was designated PSN > J13324911+4152151 when it was posted at the Central Bureau's TOCP webpage > and > is here designated SN 2014bb based on the spectroscopic confirmation > reported > below. Additional CCD magnitudes for 2014bb: 2014 Apr. 18, [19.5 > (Ciabattari > et al.); 24.004, [19.3 (Simone Leonini, P. Rosi, M. Conti, L. M. Tinjaca > Ramirez, and G. Guerrini, Siena, Italy; 0.53-m reflector); May 4.992, 17.5 > (Leonini et al.; pre-discovery image obtained in the course of the Italian > Supernovae Search Project; limiting mag about 19.3; position end figures > 49s.08, 14".6; image visible via website URL

<http://tinyurl.com/ov948d9>

); > 9.864, 16.3 (Gianluca Masi; remotely using a 43-cm telescope near Ceccano, > Italy; position end figures 49s.05, 15".3); 10.297, 16.9 (Joseph Brimacombe, > Cairns, Australia; remotely using a 43-cm CDK telescope + STL-6303 camera at > the New Mexico Skies observatory near Mayhill, NM, U.S.A.; position end > figures 49s.09, 15".2; image visible via URL

<http://tinyurl.com/qfp57g4>

). > > P. Ochner, L. Tomasella, S. Benetti, A. Pastorello, N. Elias-Rosa, E. > Cappellaro, and M. Turatto, Osservatorio Astronomico di Padova, Istituto > Nazionale di Astrofisica, report that an optical spectrogram (range 335-785 > nm; resolution 0.9 nm), obtained on May 14.84 UT with the Asiago 1.22-m > Galileo Telescope (+ Boller & Chivens spectrograph), shows that PSN > J13324911+4152151 = SN 2014bb is a type-Ia supernova. Assuming a > recessional > velocity of 8077 km/s for the host galaxy, NGC 5214 (Woods 2006, A.J. 132, > 197; via NED), a best match is found with the peculiar type-Ia supernova > 1998es at about one week before maximum light, both supernovae showing at > this > phase a shallow Si II 635-nm absorption. The prominent Na I D interstellar > doublet suggests the presence of significant extinction in the host galaxy, > with E(B-V) around 0.4 mag. An expansion velocity of about 10500 km/s is > derived from the minimum of the Si II 635-nm line. The Asiago > classification > spectra are 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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Daniel W. E. Green