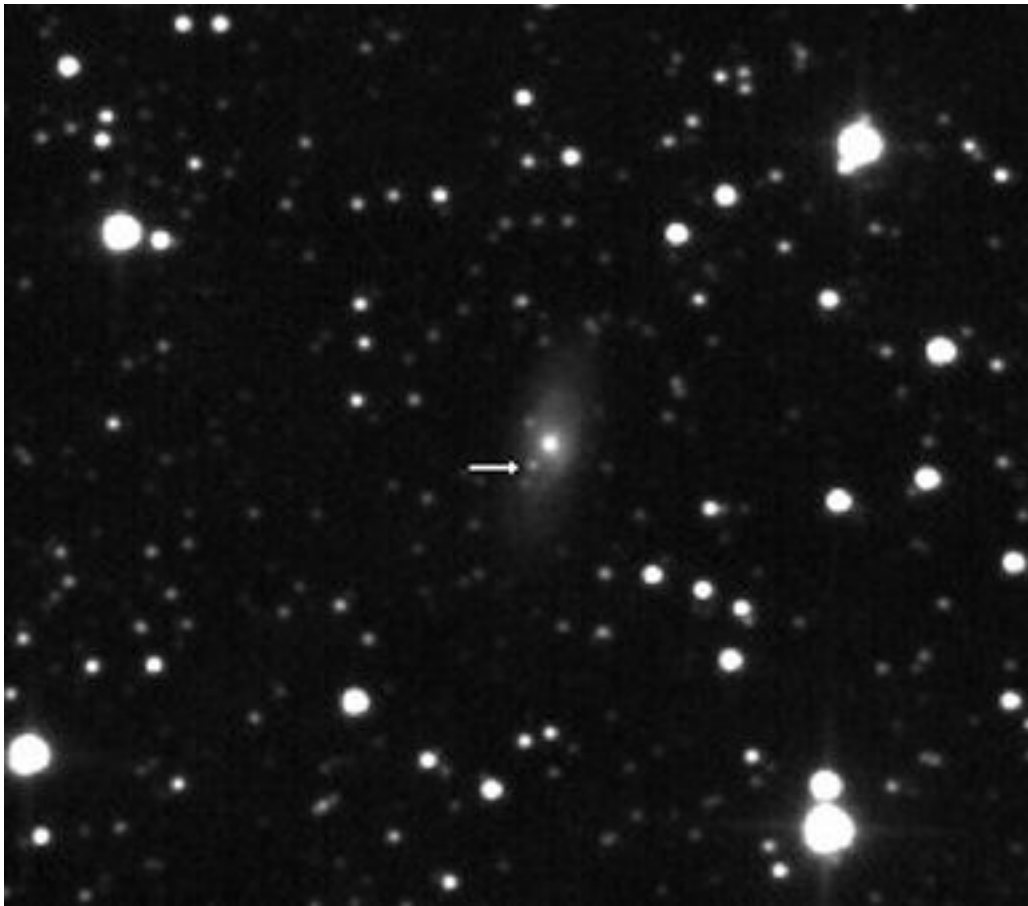


**SN 2014cg** (A.R., 20 04 34.85 Dec. +12 44 16.8), discovered on July 18th, 2014 in the galaxy UGC 11512 (offset 4E 7S), magnitude 17.8, type: Ia

SN discoverers: F. Ciabattari, E. Mazzoni and G. Petroni (Newton 20" - Monte Agliale Observatory - Lucca, Italy)



Electronic Telegram No. 3945 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

(alternate  
cbat@iau.org

) URL

<http://www.cbat.eps.harvard.edu/index.html>

Prepared using the Tamkin Foundation Computer Network SUPERNOVA 2014cg IN UGC 11512 = PSN J20043485+1244168 F. Ciabattari, E. Mazzoni, and G. Petroni, Borgo a Mozzano, Italy, report their discovery of an apparent supernova (mag 17.8) on unfiltered CCD images (limiting magnitude 19.5) obtained on July 18.95 and 19.92 UT with a 0.5-m Newtonian telescope (+ FLI 4710 Proline camera). The new object is located at R.A. = 20h04m34s.85, Decl. = +12d44'16".8 (equinox 2000.0; astrometry with respect to UCAC-2 stars), which is 4" east and 7" south of the center of the galaxy UGC 11512. Nothing is visible at this position on the digitized plates of the Palomar Sky Survey from 1992 July 27 (J plate; limiting mag 20.3) and 1992 Sept. 27 (F plate; limiting mag 20.3). The variable was designated PSN J20043485+1244168 when it was posted at the Central Bureau's TOCP webpage and is here designated SN 2014cg based on the spectroscopic confirmation reported below. Additional CCD magnitudes for 2014cg: 2014 July 4, [19.5 (Ciabattari et al.); 22.344, 18.3 (J. Brimacombe, Cairns, Australia; remotely using a 51-cm RCOS telescope + luminance filter at the New Mexico Skies observatory near Mayhill, NM, U.S.A.; position end figures 34s.83, 17".5; image posted at website URL <https://www.flickr.com/photos/43846774@N02/14543018109/>); 25.823, 18.2 (G. Masi; remotely using a 43-cm telescope at Ceccano, Italy; position end figures 34s.84, 16".2). J. Zhang, Yunnan Observatories (YNAO); and X.-f. Wang, Tsinghua University, report on an optical spectrogram (range 330-890 nm) of 2014cg that was obtained on 2014 July 24.68 UT with the 2.4-m telescope (+ YFOSC) at the LiJiang Gaomeigu Station of YNAO. The spectrum shows that PSN J20043485+1244168 = SN 2014cg is a type-Ia supernova a few days after maximum light. Cross-correlation with a library of supernova spectra using the "Supernova Identification" code (SNID; Blondin and Tonry 2007, Ap.J. 666, 1024) shows that 2014cg matches with SN 2005cg at +7 days. Adopting a redshift of 0.0147 for the host galaxy, UGC 11512 (Huchra et al. 1999, Ap.J. Suppl. 121, 287), they measure a velocity of the Si II 635.5-nm absorption feature to be about 10300 km/s. The continuum of the spectrum is very red, suggesting that this supernova may suffer significant reddening from the host galaxy. NOTE: These 'Central Bureau Electronic Telegrams' are sometimes superseded by text appearing later in the printed IAU Circulars. (C) Copyright 2014 CBAT 2014 August 28 (CBET 3945) Daniel W. E. Green