

[SN 2011hg](#) (A.R. 23 11 48.84, Dec. +31 01 00.4) scoperta il 28 ottobre 2011 nella galassia UGC 12410 (offset 19W 15S), magnitudine 18.3, tipo II.

SN scoperta da F. Ciabattari ed E. Mazzoni con il telescopio Newton da 50cm dell'Osservatorio di Monte Agliale (Lucca).

UGC 12410 è una galassia Scd distante 100 Mpc, magnitudine 16.



Electronic Telegram No. 2887

Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION

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Prepared using the Tamkin Foundation Computer Network

SUPERNOVA 2011hg IN UGC 12410 = PSN J23114884+3101004

F. Ciabattari and E. Mazzoni, Borgo a Mozzano, Italy, report the discovery of an apparent supernova (mag 18.3) on unfiltered CCD images (limiting mag 19.2) obtained on Oct. 28.76 and 29.82 UT with a 0.5-m Newtonian telescope in the course of the Italian Supernovae Search Project; the new object is located at R.A. = 23h11m48s.84, Decl. = +31d01'00".4 (equinox 2000.0; astrometry with respect to UCAC-2 stars), which is 19" west and 15" south of the center of the galaxy UGC 12410. Nothing is visible at this position on their images from Nov. 2010 (limiting magnitude 18.8). The variable was designated PSN J23114884+3101004 when it was posted on the Central Bureau's TOCP webpage and is here designated SN 2011hg based on the spectroscopic confirmation reported below.

Additional magnitudes for 2011hg (via unfiltered CCD unless noted otherwise): 1986 Nov. 3, [20.3 (Palomar Sky Survey J plate; via Ciabattari); 1989 July 13, [20.3 (Palomar Sky Survey F plate; via Ciabattari); 1989 July 13, [21 (red Palomar Sky Survey image, via Digitized Sky Survey; reported by Vitali Nevski, Vitebsk, Belarus); 2011 Oct. 29.955, 17.2 (A. Dimai, Italian Supernovae Search Project, 51-cm reflector); 29.976, R = 18.2 (Federica Luppi, Varese, Italy; 0.36-m f/7.9 reflector + Bessell R filter; position end figures 48s.80, 00".6; reference stars from CMC-14 catalogue; image posted at website URL http://www.astrogeo.va.it/pub/TOCP/PSN_U12410.jpg); 30.074, 18.1 (R. A. Koff, Bennett, CO, USA; Meade 0.25-m f/10 reflector + Apogee AP-47p CCD camera; position end figures 48s.73, 00".4; limiting mag 19.6; image scale 2"/pixel); 30.140, 18.0 (Joseph Brimacombe, Cairns, Australia; position end figures 48s.81, 00".4); 30.731, R = 18.0 (Nevski, 0.3-m reflector; position end figures 48s.80, 00".5; UCAC-3 catalogue; limiting mag 20.5). Brimacombe's image is posted at website URL <http://www.flickr.com/photos/43846774@N02/6298160700/>.

L. Tomasella, A. Pastorello, S. Valenti, and S. Benetti, Istituto Nazionale di Astrofisica (INAF), Osservatorio Astronomico di Padova, on behalf of a larger collaboration, report that a spectrogram of PSN J23114884+3101004 = SN 2011hg, obtained on Oct. 29.97 UT with the Ekar-Copernico 1.82-m telescope (+ AFOSC; range 360-810 nm; resolution 2.2 nm), is a young type-II supernova. Comparison of the observed spectrum with a library of supernova spectra using the "GELATO" code (Harutyunyan et al. 2008, A.Ap. 488, 383), suggests as a best match SN 1995V, a few days after explosion. The blue spectrum is dominated by broad H and He I (587.6-nm) lines with the

classical P-Cyg profile.

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

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2011 November 1 (CBET 2887) Daniel W. E. Green