Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION
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SUPERNOVA 2012fm IN UGC 3528 = PSN J06561339+8404502
     Alessandro Dimai, Cortina d'Ampezzo, Italy, reports the discovery by
Raffaele Belligoli and Flavio Castellani of an apparent supernova (mag about
16.7) on two unfiltered CCD images (limiting mag about 18.0) taken with the
0.4-m f/8 Ritchey-Chretien telescope of the Monte Baldo Observatory (Ferrara
di Monte Baldo, Italy), on Oct. 21.903 UT. The new object is located at R.A.
= 6h56m13s.39, Decl. +84d04'50".2 (equinox 2000.0), which is 5" east and 6"
north of the nucleus of the galaxy UGC 3528. Nothing is visible at this
position on Palomar Sky Survey infrared, red, and blue plates. An animation
of the variable covering Oct. 21-24 is posted at the following website URL:
http://www.astrofiliveronesi.it/uploads/file/UGC3528_RIF_1021_1023_1024.gif.
     The variable was designated PSN J06561339+8404502 when it was posted at
the Central Bureau's TOCP webpage and is here designated SN 2012fm based on
the spectroscopic confirmation reported below. Additional CCD magnitudes for
2012fm (unfiltered unless noted otherwise): Aug. 20.773, Sept. 30.815, and
Oct. 10.843 UT, [18.2 (D. Denisenko, E. Gorbovskoy, V. Lipunov, V. Yurkov,
E. Sinyakov, S. Yazev, V. Poleshchuk, O. Gress, and K. Ivanov; 60-s unfiltered
exposures with MASTER-Amur; MASTER robotic network of 0.40-m f/2.5 twin
telescopes; Sept. 9.9, [18.0 (Belligoli and Castellani);
Oct. 19.72, [18.3 (D. Denisenko, E. Gorbovskoy, V. Lipunov, A. Parkhomenko,
A. Tlatov, D. Dormidontov, and V. Senik; two 180-s unfiltered exposures
obtained with the MASTER-Kislovodsk telescope); 21.903, [18.2 (D. Denisenko,
E. Gorbovskoy, V. Lipunov, V. Yurkov, E. Sinyakov, S. Yazev, V. Poleshchuk,
O. Gress, and K. Ivanov; 180-s exposure with MASTER-Tunka); 23.949, 16.6
(Belligoli and Castellani); 24.728, 16.4 (Belligoli and Castellani); 25.813,
V = 15.56 +/- 0.03 (A. Vagnozzi and P. Casali, Stroncone, Italy; 0.50-m f/6
reflector); 25.840, B = 15.82 +/- 0.02 (Flavio and Belligoli; FLI1001e
camera + Astrodon filters; reduction program ANSphotometry); 25.846, V =
15.30 +/- 0.01 (Flavio and Belligoli); 25.856, 16.0 (D. Denisenko, E.
Gorbovskoy, V. Lipunov, A. Parkhomenko, A. Tlatov, D. Dormidontov, and V.
Senik; two 180-s unfiltered exposures obtained with the MASTER-Kislovodsk
telescope; position end figures 13s.37, 49".4; scale 1".84/pixel); 25.866,
B = 15.79 +/- 0.02 (Vagnozzi and Casali). A comparison of pre-outburst and
post-outburst MASTER images is posted at the following website URL:
http://master.sai.msu.ru/static/OT/PSNJ065613+840450-MASTER-Kislovodsk.jpg.

     S. Zaggia, L. Tomasella, S. Benetti, E. Cappellaro, A. Pastorello, and
M. Turatto, Osservatorio Astronomico di Padova, Istituto Nazionale di
Astrofisica, report that a spectrogram of PSN J06561339+8404502 = SN 2012fm,
obtained on Oct. 25.71 UT with the Asiago 1.82-m Copernico Telescope (+ AFOSC;
range 350-820 nm, resolution 1.3 nm), indicates that it is a type-Ia
supernova. Assuming for the host galaxy (UGC 3528) a redshift z = 0.014553
(Falco et al. 1999, PASP 111, 438; via NED), cross-correlation with a library
of supernova spectra via GELATO (Harutyuyan et al. 2008, A.Ap. 488, 383)
shows that 2012fm is similar to several normal type-Ia supernovae a few days
before maximum light. The expansion velocity deduced from the Si II 635.5-nm
absorption is about 10900 km/s.

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

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2012 October 26   (CBET 3272)   Daniel W. E. Green