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NOVA IN M31

A rather bright apparent nova in M31 has been discovered independently on an *R*-band CCD frame taken by K. Hornoch (Lelekovice, Czech Republic, 0.35-m reflector) on Jan. 7.891 UT and on unfiltered CCD frames taken by R. Arbour (South Wonston, England, 0.3-m reflector) on Jan. 10.925. Hornoch's position for the new object: $\alpha = 0^h42^m28^s.38$, $\delta = +41^o16'36''.2$ (equinox 2000.0), which is 180″ west and 28″ north of the center of M31; Arbour provides position end figures $28^s.34$, $37''.6$ (estimating the object's magnitude as ~ 15). Available *R*-band magnitudes for the nova provided by Hornoch: 2004 Dec. 18.068, [21 (3.5-m WIYN telescope image taken by P. Garnavich); 2005 Jan. 2.821, [19.8; 6.766, 19.2 (prediscovery image taken at Ondřejov by P. Kušnirák); 6.793, 19.4; 7.891, 17.9; 9.724, 15.6; 9.937, 15.27; 10.749, 15.48 (Kušnirák); 10.766, 15.32; 10.786, 15.27; 10.806, 15.30; 10.908, 15.34; 10.926, 15.31. A *V*-band image by Kušnirák taken on Jan. 10.753 yields mag 15.45.

SUPERNOVAE 2004gq AND 2005A

M. Modjaz, R. Kirshner, and P. Challis, Harvard-Smithsonian Center for Astrophysics; and T. Matheson, National Optical Astronomy Observatory, report that a spectrum (range 350–740 nm) of SN 2005A (cf. *IAUC* 8459), obtained by E. Falco on Jan. 7.24 UT with the F. L. Whipple Observatory 1.5-m telescope (+ FAST), shows it to be a type-Ia supernova, one or two weeks before maximum. The supernova expansion velocity, derived from the minimum of Si II (rest 635.5 nm) and adopting the NED recession velocity of 5738 km/s for the host galaxy, is $\sim$ 14400 km/s. Zero-velocity interstellar Na I D absorption with an equivalent width of $\sim$ 0.5 nm is detected in a spectrum of SN 2005A taken on Jan. 8.24 by P. Berlind, indicating gas along the line-of-sight in our Galaxy and thus suggesting reddening by dust. Schlegel *et al.* (1998, *Ap.J.* **500**, 525) estimate a Galactic reddening of $E(B-V) = 0.03$ mag along the line-of-sight to the host galaxy (NGC 958).

Modjaz *et al.* add that a spectrogram of SN 2004gq (cf. *IAUC* 8452), obtained by Falco on Jan. 7.29 UT, shows it to be a type-Ib supernova. The spectrum exhibits conspicuous lines of He I (rest 447.1, 587.6, 667.8, 706.5 nm) and is very similar to spectra of SN 1984L (Harkness *et al.* 1987, *Ap.J.* **317**, 355), $\sim$ 3 weeks after maximum. SN 2004gq was previously classified (*IAUC* 8404) as a type-Ic supernova.

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