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SUPERNOVAE 2004gk AND 2004gl

R. Quimby, C. Gerardy, P. Hoeflich, and J. C. Wheeler, University of Texas, report the discovery, in unfiltered CCD images taken on Nov. 25.5 and 26.5 UT with the McDonald Observatory 0.45-m ROTSE-IIIb telescope (software via the Supernova Cosmology Project and the 'Nearby Supernova Factory'), of a supernova (mag $\sim$ 13.3), designated 2004gk, located at $\alpha = 12^{h}25^{m}33^{s}.21$, $\delta = +12°15'39''.9$ (equinox 2000.0), which is $1''.5$ east (not west, as on *CBET* 99) and $2''.7$ north of the center of IC 3311. ROTSE-IIIb images from June 12.17 (limiting mag $\sim$ 17.9) showed nothing at this position. Gerardy *et al.* add that an optical spectrogram (500–1000 nm), obtained on Nov. 27.52 with the 9.2-m Hobby/Eberly telescope (+ Marcario Low-Resolution Spectrograph) by M. Shetrone and V. Riley, suggests that the supernova is of type Ic; the spectrum roughly resembles that of SN 1994I near maximum light (e.g., Clocchiatti *et al.* 1996, *Ap.J.* **462**, 462). Additional unfiltered CCD magnitudes: Nov. 27.46, 13.6 (J. McGaha, Tucson, AZ; position end figures $33^{s}.25$, $40''.4$; object not visible on Palomar Sky Survey photographs); 27.744, 13.7 (K. Kadota, Ageo, Japan, 0.25-cm *f*/7.0 reflector; communicated via S. Nakano; position end figures $33^{s}.23$, $40''.1$).

Further to *IAUC* 8444, T. Boles reports the discovery, on unfiltered CCD images taken on Nov. 21.110 and 25.959 UT, of an apparent supernova (mag 18.4), designated 2004gl, located at $\alpha = 8^{h}50^{m}04^{s}.89$, $\delta = +49°14'43''.8$, which is $\approx 0''.4$ west and $6''.5$ south of the center of MCG +08-16-31. SN 2004gl is not present on Boles' images from 2003 Apr. 25 and Mar. 18 (limiting mag 19.5) or on Digitized Sky Survey plates (1991 Feb. 12, limiting red mag 21.0; 1997 Feb. 4, limiting blue mag 20.5).

SUPERNOVA 2004ex IN NGC 182

A. Harutyunyan, M. Turatto, S. Benetti, G. Blanc, H. Navasardyan, and L. Zampieri, Osservatorio Astronomico di Padova; and A. Pastorello, Max Planck Institut, report that inspection of a spectrogram of SN 2004ex (cf. *IAUCs* 8418, 8420), obtained on Nov. 16.97 UT with the Asiago 1.8-m telescope (+ AFOSC; range 355–780 nm, resolution 2.4 nm), shows prominent 587.6-, 667.8-, and 706.5-nm He I lines and relatively faint Hα, all with P-Cyg profiles. The spectrum closely resembles that of SN 1993J at 41 days after explosion (Barbon *et al.* 1995, *A.Ap. Suppl.* **110**, 513), however, with a much fainter Hα emission. The expansion velocity, deduced from the Hα-emission minimum, is still very high ($\sim$ 10600 km/s). This therefore redefines the spectroscopic classification of SN 2004ex as type IIb.

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