Circular No. 8514

Central Bureau for Astronomical Telegrams INTERNATIONAL ASTRONOMICAL UNION

Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A. IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions) CBAT@CFA.HARVARD.EDU (science) URL http://cfa-www.harvard.edu/iau/cbat.html ISSN 0081-0304

Phone 617-495-7440/7244/7444 (for emergency use only)

SUPERNOVA 2005bo IN NGC 4708

Further to *IAUC* 8509, T. Puckett and A. Langoussis report the discovery of an apparent supernova (mag 15.3) on an unfiltered CCD frame taken with the 0.60-m automated supernova patrol telescope on Apr. 17.13 UT. The new object was confirmed at mag 15.2 on CCD frames taken on Apr. 18.05. SN 2005bo is located at $\alpha = 12^{h}49^{m}41^{s}03$, $\delta = -11^{\circ}05'47''.3$ (equinox 2000.0), which is 7''.6 west and 12''.7 south of the center of NGC 4708. Nothing is visible at this location on images taken by Puckett on 2002 Mar. 12 and 2003 Mar. 24 (limiting mag ~ 20.0). SN 2003ef also occurred in NGC 4708 (cf. *IAUC* 8131).

SUPERNOVA 2005bl IN NGC 4059

N. Morrell, G. Folatelli, M. Phillips, C. Contreras, and M. Hamuy, Carnegie Supernova Project, report that an optical spectrum (range 320– 940 nm) of SN 2005bl (cf. *IAUC* 8512), obtained on Apr. 16.13 UT with the Las Campanas 2.5-m du Pont telescope (+ WFCCD spectrograph), reveals it to be a type-Ia supernova similar to the subluminous SN 1999by, probably a few days before maximum light. Strong Ti II absorption troughs are present at about 420 and 590 nm. The expansion velocity derived from the minimum of the Si II 635.5-nm line is 11000 km/s, assuming the recession velocity for NGC 4059 given by the NED database.

J. Galagher and P. Garnavich, University of Notre Dame; and M. Modjaz, R. Kirshner, and P. Challis, Harvard-Smithsonian Center for Astrophysics, report that a spectrum (range 340-730 nm) of SN 2005bl, obtained on Apr. 16.15 UT by Galagher and Garnavich with the F. L. Whipple Observatory 1.5-m telescope (+ FAST), shows it to be a type-Ia supernova. The noisy spectrum is similar to spectra of SN 1999by (Garnavich *et al.* 2004, *Ap.J.* **613**, 1120), taken a few days before maximum, indicating that this may be a subluminous event.

SUPERNOVA 2005bk IN MCG +07-33-27

M. Ganeshalingam, R. J. Foley, D. S. Wong, F. J. D. Serduke, and A. V. Filippenko, University of California, Berkeley, report that inspection of CCD spectra (range 330–1000 nm), obtained on Apr. 17 UT with the Shane 3-m telescope at Lick Observatory, shows that SN 2005bk (*IAUC* 8512) is of type Ic, similar to SN 1994I (Filippenko *et al.* 1995, *Ap.J.* **450**, L11), ~ 1 week past maximum light.

2005 April 18

© Copyright 2005 CBAT Daniel W. E. Green