

**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 2005ke IN NGC 1371

F. Patat and D. Baade, European Southern Observatory (ESO); L. Wang, Lawrence Berkeley Laboratory; S. Taubenberger, Max-Planck-Institut für Astrophysik, Garching; and J. C. Wheeler, University of Texas, report on observations of SN 2005ke (cf. *IAUC* 8630, *CBET* 289) on Nov. 16.12 UT with ESO's Very Large Telescope (+ FORS1 in polarimetric mode). A fully reduced spectrum (range 340–855 nm, resolution 1.3 nm FWHM) shows 2005ke to be an underluminous type-Ia supernova before maximum, showing the characteristic 420-nm Ti II and 635-nm Si II lines. The spectral appearance is very similar to that of SN 1999by at 4 days before maximum light (Garnavich *et al.* 2004, *Ap.J.* **613**, 1120). The expansion velocities deduced from the absorption minima of Si II, Ca II and O I are all around 11400 km/s — with the exception of Ca II H and K, from which a velocity of 13300 km/s is deduced. The synthetic colors derived from the spectrum are $B - V = +0.33$ and $V - R = +0.24$. A preliminary reduction of the spectropolarimetric data indicates a polarization degree of several percent in the Ca II infrared triplet. SN 2005ke was re-observed on Nov. 17.11 with the same instrumentation; the velocities have decreased by ~ 400 km/s, the color became slightly redder ($B - V = +0.45$), and the polarization degree reduced by a factor of two. An earlier inspection of preliminarily reduced data led to the incorrect classification this object as a type-Ib/c supernova (cf. *CBET* 291).

COMET C/2005 W1 (SOHO)

Further to *IAUC* 8626, K. Battams has reported measurements (initial position given below) for a Marsden-group comet that was typically stellar but brightened significantly from mag nearly 9 when first detected in C3 images to ~ 5.7 in C2 images. B. G. Marsden remarks on *MPEC* 2005-W07 (where he presents both parabolic and elliptical orbital elements for the currently visible comet) that this object is probably identical with C/2000 C4 (*IAUC* 7832, *MPEC* 2000-C52, *MPC* 44860), though it is conceivably identical with C/2000 C3 or C/2000 C7 (which both appeared around the same time — and, if they still exist, are also presumably about to return).

Comet	2005 UT	α_{2000}	δ_{2000}	Inst.	F	<i>MPEC</i>
C/2005 W1	Nov. 16.579	15 ^h 32 ^m .2	-20°31'	C2/3	HS	2005-W07