Circular No. 8551

## 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 2005cq

M. Riello, Osservatorio Astronomico di Padova (OAP); S. Valenti, Universitá di Ferrara; M. Turatto and S. Benetti, OAP; M. T. Botticella and E. Cappellaro, Osservatorio Astronomico di Capodimonte; and F. Patat, European Southern Observatory (ESO), report the discovery of a supernova (R = 21.9) on a CCD frame taken during a search performed with the Max-Planck-Institute 2.2-m telescope (+ Wide Field Imager) at the ESO on May 13. SN 2005cq is located at  $\alpha = 9^{h}52^{m}00^{\circ}48$ ,  $\delta = -20^{\circ}43'26''.5$  (equinox 2000.0); the supernova and the host galaxy are not visible on reference images taken with the same equipment in Feb. 2004 (limiting mag  $R \sim 24$ ). A spectrum (range 600–1100 nm, resolution 0.6 nm), obtained on May 23.46 UT with the ESO 8.2-m ANTU telescope (+ FORS2), shows 2005cq to be a type-Ia supernova  $\sim 1$  week past maximum light, when compared with the spectrum of SN 1994D (Patat *et al.* 1996, *MNRAS* 278, 111) and a redshift of 0.31 is assumed for the parent galaxy.

## COMETS C/2005 J11, J12, and K4–K8 (SOHO)

Following are the initial available positions for additional presumed comets found on SOHO website images (continuation to *IAUC* 8549). All were Kreutz sungrazers except for C/2005 K4 (Meyer group). K. Battams writes that C/2005 J11 was diffuse with no tail, reaching mag ~ 7.2 at  $5.8R_{\odot}$  on May 15.243 UT. C/2005 J12 was tiny with no tail (too faint for photometry). C/2005 K4 was also tiny and barely above the background, and it showed no elongation. C/2005 K5 was very small, 'teardrop'-shaped, and diffuse, reaching mag ~ 8.2 at  $5.9R_{\odot}$  on May 18.701. C/2005 K6 was very diffuse with no tail and barely above the sky background. C/2005 K7 was an extremely faint and diffuse companion to C/2005 K8, which in turn was diffuse and had a hint of a tail (reaching mag ~ 8.2 at  $5.6R_{\odot}$  on May 20.535).

Comet	2005 UT	$\alpha_{2000}$	$\delta_{2000}$	Inst.	$\mathbf{F}$	MPEC	
C/2005 J11	May 15.213	$3^{h}32.2^{m}2$	$+17^{\circ}26^{'}$	C2	BZ	2005-M39	
C/2005 J12	15.910	$3 \ 34.9$	+17 34	C2	TH	2005 - M39	
C/2005 K4	16.226	$3 \ 35.9$	+20 21	C2	$\mathbf{R}\mathbf{K}$	2005 - M39	
C/2005 K5	18.685	$3 \ 45.3$	$+18\ 10$	C2	HS	2005 - M39	
C/2005 K6	20.129	3  50.4	+18 24	C2	TH	2005 - M39	
C/2005 K7	20.504	3 52.4	+18  33	C2	KB	2005 - M39	
C'/2005 K8	20.518	3 52.0	+18  35	C2	HS	2005 - M39	
2005 June 24	C	© Copyright 2005 CBAT				Daniel W. E. Green	