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COMET P/2000 QJ_{46} (LINEAR)

An apparently asteroidal discovery by the LINEAR project (discovery observation below from *MPS* 18126) has been reported now by M. Solontoi and A. West (Astronomy Department, University of Washington; with assistance by D. Schlelgel) as having a cometary appearance (with a coma and a very faint, short tail) on Sloan Digital Sky Survey 2.5-m telescope (Apache Point, NM) frames from 2000 Sept. 3 and 4; the unpublished SDSS astrometry is added below; the comet showed the following SDSS magnitudes on Sept. 3.27 UT: $u = 19.6$, $g = 18.0$, $r = 17.4$, $i = 17.2$, $z = 17.1$.

2000	UT	α_{2000}	δ_{2000}	Mag.	*Observer*
Aug.	24.27007	$22^{h}34^{m}38^{s}.81$	$-8^{\circ}24'11''.5$	18.5	LINEAR
Sept.	3.26725	22 30 05.10	−9 24 26.4		SDSS
	4.38530	22 29 33.65	−9 31 21.3		"

The following orbital elements are from *MPO* 13685:

$$\text{Epoch} = 2001 \text{ Apr. } 1.0 \text{ TT}$$

$$\begin{array}{lll} T = 2000 \text{ Dec. } 10.3467 \text{ TT} & \omega = 222^{\circ}.9660 & \\ e = 0.673150 & \Omega = 158.2344 & \Big\} 2000.0 \\ q = 1.933644 \text{ AU} & i = 4.3757 & \end{array}$$

$$a = 5.915996 \text{ AU} \qquad n^{\circ} = 0.0684955 \qquad P = 14.39 \text{ years}$$

SUPERNOVA 2005hf

R. Quimby, P. Hoeflich, S. J. Kannappan, and J. C. Wheeler, University of Texas; and C. Gerardy, Imperial College, report the discovery of a supernova (at mag ~ 16.7) in unfiltered CCD images taken on Oct. 25.12 UT using the 0.45-m ROTSE-IIIb telescope at the McDonald Observatory. The new object, found by subtracting a co-addition of images taken between July 16 and Sept. 12 (limiting mag ~ 18.9), is located at $\alpha = 1^{h}27^{m}05^{s}.97$, $\delta = +19^{\circ}07'00''.5$ (equinox 2000.0; uncertainty $\pm$ 0''.5), which is 1''.9 west and 1''.5 north of the apparent host galaxy. A spectrogram (range 420–890 nm) of SN 2005hf, obtained on Oct. 25.35 with the 9.2-m Hobby-Eberly Telescope (+ Marcario Low-Resolution Spectrograph) by J. Caldwell and E. Terrazas, shows it to be a type-Ia supernova near maximum light. In addition to Si II 635.5-nm, S II 545.4- and 564.0-nm, and weak Ca II infrared absorption features, fairly strong Na I absorption is detected that is consistent with the NED recession velocity of 12924 km/s (from Maurogordato *et al.* 1997, *A.Ap. Suppl.* **123**, 411).

2005 October 25 *Daniel W. E. Green*