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COMET P/2005 JY$_{126}$ (CATALINA)

Rik Hill reports his discovery of a comet on exposures taken on June 7.32 UT with the 0.68-m Schmidt telescope in the course of the Catalina Sky Survey, noting the object to be less distinct than surrounding stars and elongated along a northeast-southwest axis. C. W. Hergenrother, Lunar and Planetary Laboratory, writes that a co-added 1200-s *R*-band exposure with the University of Arizona 1.54-m Kuiper telescope shows the object to have a condensed, circular 15″ coma and a thin, faint tail 35″ long in p.a. 65°. The observations were linked by the Minor Planet Center to the apparently asteroidal object 2005 JY$_{126}$, a Catalina discovery published on *MPS* 134992 (discovery observation given below).

2005	UT	α_{2000}	δ_{2000}	Mag.
May	12.31877	$16^{\rm h}13^{\rm m}28^{\rm s}.16$	$-4^\circ55'13''.7$	17.4

Additional astrometry (including prediscovery observations), the following orbital elements, and an ephemeris appear on *MPEC* 2005-L36.

$$\left.\begin{array}{lll} T = 2006\ \text{Feb. } 21.1195\ \text{TT} & \omega = 117^\circ.5648 & \\ e = 0.433597 & \Omega = 207.9705 & \\ q = 2.125789\ \text{AU} & i = 20.2256 & \end{array}\right\} 2000.0$$

$$a = 3.753138\ \text{AU} \qquad n^\circ = 0.1355540 \qquad P = 7.271\ \text{years}$$

SUPERNOVA 2005cg

E. S. Rykoff, University of Michigan, on behalf of the ROTSE collaboration, reports the discovery of a supernova in unfiltered CCD images taken on June 2.04 (at mag ∼ 18.2) and 3.03 UT (mag ∼ 17.7) with the 0.45-m ROTSE-IIIc telescope at the 'High-Energy Stereoscopic Systems' site in Namibia. SN 2005cg is located at $\alpha = 21^{\rm h}10^{\rm m}50^{\rm s}.42$, $\delta = +0^\circ12'07''.4$ (equinox 2000.0), which is 0″.7 north and 0″.4 west of the core of the apparent host galaxy (which the Sloan Digital Sky Survey gives as mag $g' = 19.7$); nothing is visible at this location on ROTSE-IIIc images taken on May 7.14 (limiting mag ∼ 18.4). R. Quimby, University of Texas, adds that a spectrum (range 420–890 nm), obtained on June 3.40 with the 9.2-m Hobby-Eberly Telescope (+ Marcario Low-Resolution Spectrograph) under very poor conditions by M. Shetrone and S. Rostopchin, shows SN 2005cg to be a type-Ia supernova. Taking narrow emission lines at 677 and 501 nm to be Hα and Hβ from the host galaxy gives a redshift of 9290 km/s (yielding an absolute magnitude of −15.9 for the host galaxy).

