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INTERNATIONAL ASTRONOMICAL UNION**

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COMET C/2009 U1 (GARRADD)

G. J. Garradd, Siding Spring Observatory, reports his discovery of a comet with the 0.5-m Uppsala Schmidt telescope (discovery observation tabulated below); stacking five 60-s exposures showed a 7".4 coma (FWHM) and faint fan tail 30" long in p.a. 160° with a 45° fan angle.

2009	UT	α_{2000}	δ_{2000}	Mag.	<i>Observer</i>
Oct. 17.71474		4 ^h 25 ^m 38 ^s .40	-39°15'50".6	19.6	Garradd

Additional astrometry, the following very preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2009-U27:

$$\left. \begin{array}{l} T = 2010 \text{ July } 7.819 \text{ TT} \quad \omega = 6.404 \\ \Omega = 67.196 \\ q = 2.96357 \text{ AU} \quad i = 68.944 \end{array} \right\} 2000.0$$

COMET P/2009 U2 (LINEAR)

J. V. Scotti reports his recovery of comet P/2001 YX₁₂₇ (cf. *IAUC* 7828) with the Spacewatch II telescope at Kitt Peak; the comet was very slightly diffuse, with a short but faint tail. The indicated correction to the prediction in the *2009/2010 Comet Handbook* is $\Delta T = -0.33$ day (and $\Delta T = -0.36$ day to the prediction on *MPC* 62881).

2009	UT	α_{2000}	δ_{2000}	Mag.	<i>Observer</i>
Oct. 18.45096		3 ^h 23 ^m 08 ^s .99	+21°29'50".3	20.9	Scotti
18.46185		3 23 08.66	+21 29 50.2	21.0	"
18.47364		3 23 08.29	+21 29 49.7	20.9	"
19.27723		3 22 42.50	+21 29 33.1	21.2	"
19.28834		3 22 42.12	+21 29 33.1	21.5	"
19.30024		3 22 41.71	+21 29 32.4	21.0	"

The following orbital elements (from observations 2001–2009), with residuals and an ephemeris, appear on *MPEC* 2009-U40.

$$\begin{array}{l} \text{Epoch} = 2011 \text{ Aug. } 27.0 \text{ TT} \\ \left. \begin{array}{l} T = 2011 \text{ Aug. } 23.8431 \text{ TT} \quad \omega = 114.7933 \\ e = 0.177193 \quad \Omega = 31.0664 \\ q = 3.430474 \text{ AU} \quad i = 7.9154 \\ a = 4.169232 \text{ AU} \quad n^\circ = 0.1157764 \quad P = 8.51 \text{ years} \end{array} \right\} 2000.0 \end{array}$$