

**Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION**

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COMET C/2008 H1 (LINEAR)

An apparently asteroidal object discovered by the LINEAR project (discovery observation below) and posted on the Minor Planet Center's 'NEOCP' webpage, was first reported as cometary by E. Reina L., Hospitalet, Spain, on Apr. 19.0 UT (0.25-m $f/3.3$ Schmidt-Cassegrain reflector), who noted a $25''$ coma of total mag 16.6 and a $43''$ tail in p.a. 233° . E. Guido and G. Sostero, observing remotely from Mayhill, NM, U.S.A., on Apr. 19.5 (0.25-m $f/3.4$ reflector), report that stacking twenty unfiltered 60-s CCD exposures in strong moonlight showed the object to be diffuse in comparison to stars of similar brightness. J. M. Aymami, Tiana, Spain (0.13-m $f/5.9$ refractor), remarked on a suspected coma in p.a. 209° on Apr. 19.8. At the same time R. Apitzsch, Wildberg, Germany (0.35-m $f/4.2$ reflector) noted a tail to the southwest.

2008	UT	α_{2000}	δ_{2000}	Mag.
Apr. 18.34722		$17^{\text{h}}02^{\text{m}}01^{\text{s}}.68$	$+79^\circ15'56''.0$	18.1

The available astrometry, the preliminary parabolic orbital elements ($T = 2008 \text{ Mar. } 11.781 \text{ TT}$, $q = 2.78957 \text{ AU}$, $\omega = 94^\circ644$, $\Omega = 33^\circ724$, $i = 75^\circ770$, equinox 2000.0), and an ephemeris appear on *MPEC* 2008-H09.

V2491 CYGNI

R. J. Rudy, D. K. Lynch, and R. W. Russell, The Aerospace Corporation; C. E. Woodward, University of Minnesota; and K. Covey, Center for Astrophysics, report on SpeX observations (wavelength range $0.8\text{--}2.5 \mu\text{m}$) of this nova (cf. *IAUC* 8934) obtained at the Infrared Telescope Facility on Apr. 17.6 UT. In the five days since Lynch *et al.* (*IAUC* 8935) observed V2491 Cyg on Apr. 12, it declined in brightness by a factor of 3. The strengths of the emission lines compared to the continuum have generally increased, as has the excitation of the emission-line spectrum. The neutral helium triplet and singlet at 1.08 and $2.06 \mu\text{m}$, respectively, doubled in size relative to the hydrogen lines. Although the C I and N I lines decreased, the O I lines at 0.84 and $1.13 \mu\text{m}$, which are fluorescently excited by $\text{Ly}\beta$, are now the strongest emission features in the infrared spectrum. Their increase has permitted more accurate measurements of their relative strengths, which indicate a reddening of $E(B-V) = 0.43$, a value slightly greater than that reported by Lynch *et al.* Photometric magnitudes on Apr. 17: $J = 7.7$, $H = 7.8$, $K = 7.4$.