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COMET 73P/SCHWASSMANN-WACHMANN

S. N. Milam, A. J. Apponi, L. M. Ziurys, and S. Wyckoff, Arizona Radio Observatory and Steward Observatory, report that observations of the J = 1-0 transition of HCN at 88.6 GHz were conducted towards component 'C' of comet 73P on Apr. 11.36 UT with the Arizona Radio Observatory 12-m telescope on Kitt Peak. Two out of three hyperfine components were detected with intensities of 0.035 ± 0.005 K for the F = 2-1 transition and 0.024 ± 0.006 K for the F = 1-1 line, with corresponding line widths of 1.0 ± 0.2 and 0.7 ± 0.2 km/s, respectively. These measurements indicate a total column density of $\sim 3.4 \times 10^{11}$ cm^{-2} for HCN in the 'C' source of 73P. A production rate of Q(HCN) $\sim 3.05 \times 10^{25}$ s^{-1} [correction to *CBET* 474] was calculated using a Monte Carlo model, assuming that this molecule is a parent species arising from the nucleus. This transition of HCN appears at the cometocentric velocity derived from the JPL Horizons ephemeris.

V2362 CYGNI

A. Siviero, U. Munari, and M. Valentini, INAF, Padova-Asiago; and P. Valisa, Centro Geofisico Prealpino, report that high-dispersion spectra (range 370–730 nm; resolving power 21000) of V2362 Cyg (cf. *IAUC* 8697, 8698) were obtained on Apr. 13.1 UT with the Asiago 1.82-m telescope; low-dispersion spectra (range 410–700 nm; dispersion 0.17 nm/pixel) were obtained about the same time with the 0.6-m telescope of the Schiapparelli Observatory in Varese. The nova belongs to the 'Fe II class' in showing prominent Fe II emission lines from multiplets 27, 37, 38, 42, 48, 49, and 74 — in addition to [O I] at 557.7, 630.1, and 636.4 nm, and also Na I and Balmer series lines. Hα and Hβ display a very broad and structured profile with FWZI = 3750 km/s and FWHM = 1800 km/s. The interstellar Na I D in absorption shows two narrow components (FWHM 20 km/s) at radial velocities -39 and -11 km/s; their equivalent widths correspond, via a Munari and Zwitter (1997, *A.Ap.* **318**, 269) calibration, to a total reddening of the nova of $E(B-V) = 0.56$.

H. Yamaoka, Kyushu University, reports the following precise position for V2362 Cyg using UCAC2-catalogue stars: $\alpha = 21^{\rm h}11^{\rm m}32^{\rm s}.346 \pm 0^{\rm s}.010$, $\delta = +44^\circ 48'03''.66 \pm 0''.14$ (equinox 2000.0; details on *CBET* 466). The nearby "red" star mentioned on *IAUC* 8697 has UCAC2 position end figures $31^{\rm s}.884$, $3''.23$. The DSS blue (1993 June 27) and red (1990 Sept. 10) images show a dimmer object (red mag $\sim$ 18) near the nova's position; if it is a true progenitor, the amplitude of nova outburst is $\sim$ 10 magnitudes.