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V2467 CYGNI = NOVA CYGNI 2007

U. Munari, Istituto Nazionale di Astrofisica, Padova Astronomical Observatory; and G. Dalla Via, P. Valisa, S. Dallaporta, and F. Castellani, ANS ("Asiago Novae and Symbiotic stars") Collaboration, writes that an absolutely fluxed optical spectrum (range 400-734 nm, resolution 0.0175 nm/pixel) of Nova Cyg 2007 (cf. CBET 890, 891; IAUC 8821) was obtained on Mar. 18.16 UT. Overall, the spectrum shows emissions of modest intensity with prominent P-Cyg affecting only the Na I profile. Most of the flux is emitted from the relatively smooth underlying continuum. The nova belongs to Williams' (1992, A.J. 104, 725) 'Fe II' class, with strongest Fe II emission lines belonging to multiplets 37, 38, 42, 48, 49, 55, and 74. The expansion velocity derived from Fe II emission-line profiles is 900 km/s. The integrated flux of the Fe II multiplet-42 line at 492.3 nm is 2.5×10^{-11} erg cm⁻² s⁻¹, and that of the multiplet-74 line at 624.6 nm is 2.2×10^{-11} erg cm⁻² s⁻¹. The integrated flux of the H_{beta} emission line is 6.1×10^{-11} erg cm⁻² s⁻¹, and the H_{alpha}:H_{beta}:H_{gamma} emission ratio is 9.31:1.00:0.14. H_{alpha} shows a symmetric, gaussian-like emission profile characterized by an expansion velocity of 910 km/s, with superimposed a sharp absorption component centered at -913 km/s (with respect to the peak of emission component) with a FWHM of 405 km/s (corrected for instrumental resolution) and an equivalent width of 0.519 nm. A much weaker absorption component is located at -1900 km/s, FWHM = 270 km/s, and EW = 0.09 nm. Similar absorptions are visible in H_{beta}. Diffuse interstellar bands are observed at 442.8, 578.0 (equivalent width 0.179 nm), 579.6 (0.052), 628.4 (0.175), and 661.4 (0.030) nm. The limited spectral resolution allows only a preliminary estimate of the reddening: the 0.05-nm equivalent width of interstellar Na I D2 would correspond to E(B-V) = 0.31, following the calibration by Munari and Zwitter (1997, A.Ap. 318, 269). CCD and photoelectric photometry for Mar. 18.15 gives V = 8.29 (+/- 0.02) and B-V = +1.52 (+/- 0.02).

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