

The symbiotic star Hen 2-468 is undergoing a rare and bright outburst

ATel #6841; *U. Munari (INAF-Padova), S. Dallaporta and F. Castellani (ANS Collaboration)*
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Credential Certification: U. Munari (ulisse.munari@oapd.inaf.it)

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The symbiotic star Hen 2-468 (V2428 Cyg) is on a fast rise toward a bright outburst, brighter than the only previously recorded active phase for this star during 1980-1984. A reflection/heating effect with an orbital period of 774 days modulates the quiescent brightness of Hen 2-468 between $B \sim 15.8$ and $B \sim 16.9$ (Munari and Jurdana-Sepic 2002, A&A 386, 237) suggesting a large orbital inclination. We are intensively monitoring the star since 2007 without seasonal gaps. Our last photometric measurement was obtained on 2014 Dec 20.7 UT when we measured Hen 2-468 at $B=14.39$, $V=13.21$, $R_c=12.37$ and $I_c=11.08$. Hen 2-468 is now ~ 2.4 mag brighter in B than when it started the steep (~ 0.05 mag in B-band per day) rise in brightness around 2014 Nov 1 when we measured the star at $B=16.75$, $V=14.90$, $R_c=13.43$ and $I_c=11.58$. In quiescence, the emission line spectrum of Hen 2-468 (cf. Munari and Zwitter 2002, A&A 383, 188) is characterized by high ionization and high density conditions with no significant nebular lines, HeII 4686 vastly larger than HeI and of an intensity similar to Hbeta, and a strong symbiotic band at 6825 Ang (Raman scattering of OVI by neutral hydrogen). On our last spectrum, obtained on 2014 Dec 18.75 UT with the Asiago 1.22m telescope (range 3350-7980 Ang, dispersion 2.31 Ang/pix), all emission lines are gone, only Halpha and Hbeta remain visible, and a strong bluer continuum veils the TiO bands of the M giant well into the R_c band. Compared to 2014 Oct 17, the Hbeta integrated flux has increased nearly three times, from 2.73×10^{-14} to 7.60×10^{-14} erg cm^{-2} s^{-1} and the Halpha/Hbeta ratio has declined from 19.4 to 12.8.

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R. E. Rutledge, Editor-in-Chief

`rrutledge@astronomerstelegram.org`

Derek Fox, Editor

`dfox@astronomerstelegram.org`

Mansi M. Kasliwal, Co-Editor

`mansi@astronomerstelegram.org`