

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

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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  $\sim 2.4$  mag brighter in B than when it started the steep ( $\sim 0.05$  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  $2.73 \times 10^{-14}$  to  $7.60 \times 10^{-14}$  erg  $\text{cm}^{-2}$   $\text{s}^{-1}$  and the Halpha/Hbeta ratio has declined from 19.4 to 12.8.

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