

High-resolution spectroscopy of the intermediate polar EX Hydrae

I. Kinematic study and Roche tomography (*Corrigendum*)

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We found that the systemic velocity $\gamma = -58.2 \pm 1.0 \text{ km s}^{-1}$ quoted by Beuermann & Reinsch (2008) lacked the correction for the observer's motion relative to barycenter of the solar system. Mending the error is fortunately simple, since the velocities for the individual observations on 23 and 26 January 2004 are very close, between $+27.57$ and $+28.12 \text{ km s}^{-1}$, and it suffices to add the weighted mean of 27.9 km s^{-1} to our radial velocities. The corrected value of the systemic velocity of EX Hya is $\gamma = -30.3 \pm 1.0 \text{ km s}^{-1}$, measured relative to the barycenter of the solar system. It replaces γ as quoted in Tables 4 and 5 and in Sects. 6.3 and 7.2 of our 2008 paper. The correction should also be applied to the systemic velocities quoted in Table 2. None of the conclusions of the paper are affected. The predicted mass-based gravitational redshift of the white dwarf,

$u_{\text{grav}} = 47.6 \pm 3.1 \text{ km s}^{-1}$, stays unchanged, but the predicted systemic velocity of the redshifted ultraviolet and X-ray lines that originate from the surface of the white dwarf, $\gamma + u_{\text{grav}} = +17.3 \pm 4.1 \text{ km s}^{-1}$, is now in better agreement with the observed value of Belle et al. (2003), $\gamma = +9.5 \pm 3.0 \text{ km s}^{-1}$ for the narrow component of the far-ultraviolet emission lines and a value of roughly 20 km s^{-1} for the X-ray emission lines (Mauche, priv. comm.). We thank Chris Mauche for spotting the error.

References

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