

Figure 12. ONLINE ONLY: The 2007 Stokes I LSD profiles and fits are shown after subtraction of the model immaculate (unspotted) stellar profiles. The solid line is the maximum entropy regularised fit we obtain to the data from Doppler imaging. Profiles are ordered by orbital phase (listed to the right of each profile). For reference, the primary star is the profile seen generally at negative velocities for phases $\phi = 0.0 - 0.5$. The residuals in the centre of the stellar profiles are starspots and are mostly well modelled. We note however that poor agreement is found at the extremities of the rotational profiles of both stars. This is similar to that observed for the contact binary AE Phe by Barnes et al. (2004). Here the authors attributed the mis-match to inadequate modelling of centre-to-limb brightness variation. A more sophisticated treatment of limb darkening beyond the linear limb darkening used here is required.