

## Asymmetry in the Light Curves of Black Hole Binary Candidates and Doppler Beaming Effect

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Black hole binary candidates in their quiescent states exhibit ellipsoidal light curves attributed to the aspherical shape of the Roche lobe filled by the K or M type companions. It is known that the light curves of black hole binaries exhibit different maxima in the photometric phases 0.25 and 0.75, which are often attributed to the existence of cool star spots or hot impact points in the accretion disk. We point out that the special relativistic Doppler beaming effect due to the orbital motion of  $\sim 500$  km/s may significantly contribute to the asymmetry of the light curves. We also present our photometric observations of black hole binary systems using the Mt. Bohyun 1.8 m telescope.