

SUPER-MASSIVE BINARY BLACK HOLE AND POLARIZATION IN THE BROAD LINES

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A number of active galactic nuclei (AGNs) show complex broad lines (with double peaks, highly shifted to the blue or red, and with a strong asymmetry). Some of these AGNs are established as super-massive binary black hole (SMBBH) candidates. Here we explore the polarization characteristics across broad emission Lines when an AGN hosts a SMBBH. We used the 3D Monte Carlo radiative transfer code STOKES Goosmann & Gaskell (2007), Marin et al. (2012, 2015) to investigate polarized broad line emission conducting modeling for a range of system parameters.