Progress Report

TESTING A BINARY BLACK HOLE HYPOTHESIS FOR THE CASE OF NGC 5548

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Recent results indicate periodic variability in NGC 5548 (see Bon et al 2016 and Li et al 2016). We test the hypothesis that such periodic variability in light and radial velocity curves could be produced by a supermassive binary black hole system in its core, using spectroscopic data from a very long monitoring campaigns spanning over 42 years. We model orbital elements and mass ratio of the binary system.