

## Determining the Individual Masses of Accreting White Dwarf Binaries

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Accreting binary white dwarf systems are among the sources expected to emanate gravitational waves that will be detectable by LISA. We attempt to ascertain whether the individual masses of such a binary can be determined from LISA's measurements of the frequency and frequency time derivative of gravitational waves emanated by the binary. We present analytic expressions for the gravitational wave frequency and its derivative in terms of the individual masses, which we derive using prior knowledge of mass accreting mechanisms for low-mass helium core white dwarfs. We then perform a Fisher analysis to reveal the accuracy with which we expect to be able to constrain the individual masses given LISA's measurements.

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