

# UNCOVERING THE POPULATION OF CLOSE WHITE DWARF BINARIES USING ECLIPSES

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The zoo of compact white dwarf binary stars is diverse, with accreting and detached systems, white dwarfs with different types of companions that span a large range of different masses, and also systems with strong magnetic fields. We have been systematically searching the Zwicky Transient Facility data to find eclipsing compact white dwarf binaries. Eclipses are useful both to identify compact white dwarf binaries (it is a well-defined selection method), but also to characterize the binary systems (by modelling the lightcurves). I will present the sample of eclipsing systems discovered with ZTF so far and discuss what we learned from this sample. This includes a period distribution of 800 white dwarf - red dwarfs binaries which does not show any 'period-spike' between 2 and 3 hrs; a sample of 20 white dwarfs with dark companions which has not revealed any new white dwarf planet systems, but does contain 5 CV period bouncers which confirms the predicted period bouncer population does exist, and also several eclipsing AM CVn systems which have been extremely useful to understand the nature of AM CVn donor stars. I will conclude with a short outlook and how we can use current and future photometric survey telescopes to understand white dwarf population by finding even larger samples of eclipsing white dwarf binary systems.