

TESTING WHITE DWARF AGE ESTIMATES USING WIDE DOUBLE WHITE DWARF BINARIES FROM GAIA EDR3

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White dwarf stars evolve simply and predictably, making them reliable age indicators. However, self-consistent validation of the methods for determining white dwarf total ages has yet to be widely performed. Widely separated double white dwarf binaries are the perfect systems to test white dwarf total ages but only recently, with the launching of the Gaia mission, have large samples of these double white dwarfs been available. These double white dwarf systems can also provide insight into white dwarfs that experienced a merger in their past by making comparisons of their total ages. For such large samples of white dwarfs, spectroscopy is not readily available and thus most total age determinations rely on photometric data from all-sky surveys and must assume a spectral type of the white dwarf. In this talk, I will discuss recent work testing white dwarf total ages in large photometric samples using widely separated double white dwarfs from Gaia EDR3 as well as the implications of the results on the population of white dwarfs that have experienced a merger in their past.