

DISCOVERY OF THE FIRST WHITE DWARF + T DWARF BINARY SYSTEM AND THE USE OF WHITE DWARFS AS AGE CALIBRATORS

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We present the discovery of the first white dwarf + T dwarf binary system. Systems containing a white dwarf and a brown dwarf are rare but can be used to place constraints on the age of the binary, making them valuable benchmark systems. It is currently not possible to calculate brown dwarf ages from models alone and white dwarfs provide an opportunity to aid the calibration of these models. We describe our program to identify such benchmark binary systems in the latest releases of UKIDSS/SDSS and review the level of constraints currently provided by benchmark objects. Finally we describe the niche age space that white dwarf + brown dwarf binary systems can provide and look at how many more systems may be identified in future surveys, such as VISTA and WISE.