

Kepler Observations of White Dwarfs

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The faint white dwarf BOKS 53836 was observed in short cadence mode by the Kepler Mission in mid-2009 for 90 days. Analysis of these observations reveals a highly stable photometric modulation with a 3.48 percent half-amplitude and a period of 6.138 hours. Power spectra show only single fundamental frequency and three harmonics, with no significant power at other frequencies. The folded light curve displays an unusual non-sinusoidal shape that is not id difficult to explain in terms of white dwarf spin or a binary system containing an unseen companion. Recent observations with the NOAO Mayall 4-m telescope show a hot DA white dwarf with no obvious signs of Zeeman splitting or an early M-star companion. Kepler observations of other non-variable white dwarfs will be discussed.