

THE O-C DIAGRAM OF EC20058-5234: DETECTION OF NEUTRINO EMISSION?

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EC20058-5234, a hot DB pulsator, is the target of a long term campaign to measure the effect of neutrino emission on white dwarf cooling. Neutrino emission in hot DBV white dwarfs is believed to contribute over half of the total luminosity and should have a significant effect on the cooling rate. In pulsating white dwarfs, cooling should slowly change the observed periods. We present the O-C diagram and \dot{P} measurements for several pulsation modes of EC20058-5234. We will discuss the implications of our results in terms of current white dwarf cooling theory and possible planetary companions.