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Exploring new techniques for analyzing variability in white dwarfs THOMAS HUCKANS, PETER STINE, Bloomsburg University of Pennsylvania — As is common with the collection of astronomical data, signals are frequently dominated by noise. However, when performing Fourier transforms of light curves, re-binning data can improve signal-to-noise ratios at lower frequencies. Using data collected from the Kepler space telescope, we sequentially re-binned data up to four times to investigate the improvement of lower frequency (<15 μ Hz) variability in white dwarf KIC 8626021. In addition, the use of phase-space modeling to represent the momentum of the data is explored, in order to find whether random or systematic processes emerge in the luminosity of this white dwarf.

Thomas Huckans Bloomsburg University of Pennsylvania

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