

THE ZZ CETI INSTABILITY STRIP

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We have selected more than 300 DA white dwarf stars from Sloan Digital Sky Survey database with effective temperature inside or close to the ZZ Ceti instability strip to search for pulsator stars. As we know, if the instability strip is pure, it means that the pulsation is a normal stage for all white dwarfs. We have made photometric monitoring of a few DAs in the last year and found no stars with light variations. These non variable stars have effective temperature between 10.806 K and 12.308 K placing them inside or very close to the instability strip. For some of them the limit of non variability is high and they need to be re-observed. On the other hand, these are very faint stars and their spectra have low signal-to-noise. So, the effective temperature determination is not very confident. With the recent SDSS releasing, the number of DAs close to the instability strip has increasing rapidly. Therefore, the response on the purity of the strip will come from a statistical analysis. This will be our next task.