



Contribution ID: 169 Contribution code: S4 High Energy and Particle Physics  
Presentation

Type: Oral

## Photometric Variability of High Amplitude Delta Scuti Stars from AAVSO International Database

*Friday 24 June 2022 15:30 (15 minutes)*

This research aims to study photometric variability and Fourier analysis of High Amplitude Delta Scuti stars (HADS), which are interesting short period variable stars with spectral types between A2 and F0. They are located in the area of the classical cepheid instability strip, which crosses the main-sequence (MS) on the Hertzsprung-Russell (H-R) diagram. The CCD photometric  $V$ -magnitude data of the selected HADS stars were acquired based on the AAVSO international database (American Association of Variable Stars Observers), which is the largest and most comprehensive digital variable star database. Time-series light curve data was accomplished using discrete Fourier transformation. The pulsating properties of the selected HADS stars were analyzed using the Period04 astronomical program. We obtained the times of maxima, magnitude changes and pulsation frequencies for each star. The study of the pulsation frequencies,  $O-C$  diagram, and period change of HADS stars can estimate their pulsation modes and their evolution. HADS stars are very important as standard candles that can be used to measure galactic distances.

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**Session Classification:** S4 High Energy and Particle Physics

**Track Classification:** High Energy and Particle Physics