

Abstract Submitted
for the CUWIP22 Meeting of
The American Physical Society

Photometric Study Of RR Lyrae Star TV Lyn SHEKAYLA LOVE, SUSMITA HAZRA, Cameron University — In this research, we are reporting the light curve of RR Lyrae type variable star TV Lyn. This star is observed in the northern hemisphere and its coordinates are 07:33:31.7 +47:48:09.8. We have used data from Las Cumbres Observatory (LCO) which consists of a worldwide network of robotic telescopes. Photometric measurements were conducted using the SBIG 6303 0.4-meter telescope with a field of view of 29 x19. Depending on what the color of a star is when different filters are applied to it, the luminosity will change accordingly. Our data consists of four filters, Bessell B (Blue), Bessell V (visual), SDSS-I (Infrared), and PAN-STARRS-Z (Near Infrared). Results show that this star has a variability period of 0.24070.002 days, metallicity -1.49, and located at a distance of 1362118 pc. We have used estimate of the reddening $E(B-V) = 0.08$. This research is a part an Our Solar Sibling Project by an undergraduate student with the help of a faculty advisor and an Our Solar Project Investigator.

SheKayla Love
Cameron University

Date submitted: 11 Jan 2022

Electronic form version 1.4