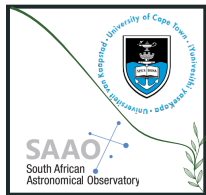


Contributed Talk //

Cataclysmic variables



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Session 3 //

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CTCV J2056-3014 is a peculiar cataclysmic variable with disparate characteristics. It holds the classifications of both SU UMa-type dwarf nova and intermediate polar, based on its recent 2020 superoutburst and an indisputable period detectable at 29.61 seconds (in the optical and X-ray) associated with the spin of the white dwarf. In addition to those above, it is an X-ray faint source (with an X-ray luminosity of $L_X \sim 10^{31}$ erg s⁻¹; up to two orders of magnitude fainter than the typical intermediate polar) which places it amongst the purported low-luminosity intermediate polar systems which overwhelmingly present with short orbital periods (1.76 hours in this case).

In this talk, I present time-series analysis of many hours of high-speed optical photometry obtained from the two 1m diameter telescopes at the South African Astronomical Observatory, and the AAVSO archive. The lightcurves display a high degree of flickering and rapid variability on the order of minutes. The power spectra reveal curious features close to the spin during superoutburst that are not yet attributable to a known beat period in the system. We further aim to confirm the orbital period through the radial velocity method using time-resolved spectra obtained by the South African Large Telescope.

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