

PHYSICS SEMINAR

Optimizing Calibration Frames for CMOS Photometry

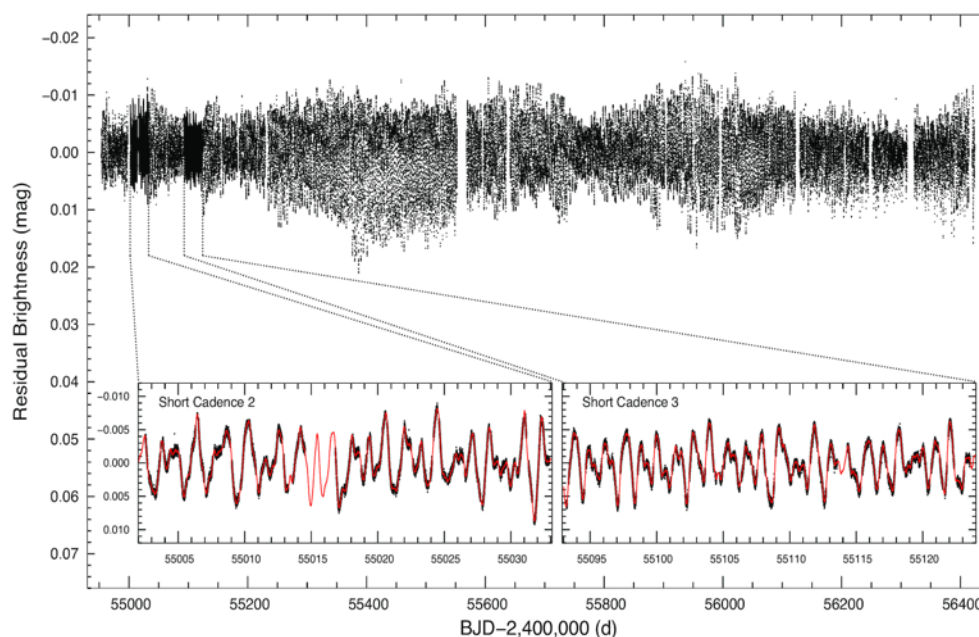
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Thursday, September 10, 2026

12:30 – 1:30 p.m.

Wubben 264

Despite over a decade of use in scientific endeavors, direct quantification of the utility of CMOS sensors remains elusive in scientific literature. So far, the utility has been measured by whether a phenomenon such as an exoplanet transit or variability in stars is able to be observed with a given telescope/camera pairing. However, very little literature in terms of predicting the signal-to-noise ratio (SNR) a given system can achieve exists. This talk will discuss different calibration pipelines used when performing scientific photometry with CMOS sensors, as well as introduce camera characterization techniques to improve predicted SNR expected from a CMOS camera at given settings.



Refreshments!