

## **Commission B6 Activity: Astronomical Photometry and Polarimetry**

The past year was largely impacted by the global COVID-19 pandemic; many, if not most, activities were curtailed if not cancelled. As a result, most of the B6 activities were confined to small groups and those able to work effectively in remote circumstances.

Many exciting results came from the TESS and K2 space photometry surveys:

- (1) A lot of this work is of course exoplanet related, with large numbers of exoplanets found, over 5000 to date.
- (2) A particularly interesting result from the stellar science, there are "Complex rotators" among M dwarf rotating stars. Analyses of the data continue.

Ground-based photometry continues, especially time series. A large number of ground-based photometry continues, especially that performed by robotic telescopes.

Time-series photometric work based on Gaia data has resulted in the publication of the largest samples of rotating stars to date.

Ground-based and space-based work on determining the rotational distributions of open clusters.

Work continues to finalize the Dark Energy Survey photometric data from observing year 6.

Work continues to characterize DA white dwarfs to use as absolute flux calibrators, currently concentrating on the Dark Energy Survey footprint. Analyses are nearly complete for an initial sample of ~100 high quality WD calibrators. An expanded effort to include the entire LSST footprint is beginning as the U.S. National observatories are beginning to open again.