

PHOTOMETRY OF AN ECLIPSING SYSTEM WITH A WHITE DWARF COMPONENT

Roi Alonso

Laboratoire d'Astrophysique de Marseille

GO30016

We plan to continue our research on one of the very few systems of a white dwarf with a M star eclipsing component that is accessible to Kepler FOV. Extending the observations through Cycle3 will allow us to 1) improve the precision on the orbital parameters, 2) study the annual evolution of the flare activity on the M companion and its dependence with the orbital phase, 3) study the evolution of magnetic active regions on any of the components, 4) improve the precision on the expected detection of a secondary eclipse, 5) gain valuable data on the O-C residuals of the 1040 eclipses/year that Kepler is able to obtain, that might allow the detection of small stellar companions and probably substellar, and 6) search for pulsations of the WD component.