
Photometry Using Kepler "Superstamps" of Open Clusters NGC 6791 & NGC 6819

Charles Kuehn*¹, Jason Drury¹, Dennis Stello¹, and Timothy Bedding¹

¹The University of Sydney (USYD) – Physics Office, Room 210, Building A28 SifA, H90 School of Physics University of Sydney NSW 2006 Australia, Australia

Abstract

The Kepler space telescope has proven to be a gold mine for the study of variable stars. Unfortunately Kepler only read out a handful of pixels around each pre-selected target star, omitting a large number of stars in the Kepler field. Fortunately, for the open clusters NGC 6791 and NGC 6819, Kepler also reads out larger superstamps which contain complete images of the central region of each cluster. These cluster images can be used to study additional stars in the open clusters which were not originally on Kepler's target list. In this talk I will discuss our work on using traditional photometric techniques to analyze these superstamps. I will present sample results from this project to demonstrate the value of this technique for a wide variety of variable stars.

*Speaker