

# PHYSICAL PARAMETERS OF CLOSE BINARY CENTRAL STARS OF PLANETARY NEBULAE

Todd Hillwig; David Jones; Nicole Reindl

*Valparaiso University; Instituto de Astrofísica de Canarias; Universität Potsdam*

Planetary nebula central stars provide a unique stage of evolution in the study of post common envelope binary systems. These systems are just out of the common envelope phase, before any additional evolution has occurred in the binary. However, given the short evolutionary time for this stage there is not a large population of such systems. Therefore, we have been working to build up a statistically significant sample of these systems both through the discovery of new close binary central stars and through the determination of physical parameters of individual systems. Here we present recent results of binary modeling for several close binary central stars of planetary nebulae. The parameters we present include masses, radii, and temperatures for each component along with orbital period, separation, and inclination of the binary system. The Phoebe binary modeling software was used to produce these values.