

# POST-AGB EVOLUTION IN CLOSE BINARIES: OBSERVATIONAL PARAMETERS COMPARED TO EVOLUTIONARY MODELS

Todd Hillwig; Marcelo M. Miller Bertolami; David Jones; Nicole Reindl

*Valparaiso University; IALP, UNLP-CONICET; Instituto de Astrofísica de Canarias; Universität Potsdam*

We compare physical parameters for the central stars of planetary nebulae (CSPNe) determined from observations and binary system modeling with theoretical values from post-AGB evolution calculations. Temperature and  $\log g$  values from spectra of CSPNe can be used with post-AGB evolutionary models to determine mass and radius of the central star. Similarly, light and radial velocity curves can be used with binary modeling programs such as Phoebe to also arrive at mass and radius values. We find that, perhaps unsurprisingly, these two methods do not provide results that are in agreement. Here we discuss the differences and search for patterns that can be used in the study of future systems and which can help us understand how close binary evolution and the common envelope phase may affect post-AGB evolution.