
Search for binary central stars of the LMC PNe

Marcin Gładkowski^{*†1}, Ryszard Szczerba², and Igor Soszyński³

¹N. Copernicus Astronomical Center (NCAC Toruń) – Rabiańska 8 87-100 Toruń, Poland

²N. Copernicus Astronomical Center (NCAC Toruń) – Rabiańska 8 87-100 Toruń, Poland

³Warsaw University Observatory (Warsaw UO) – Al. Ujazdowskie 4 00-478 Warszawa, Poland

Abstract

The Optical Gravitational Experiment (OGLE) data were effectively used in discovering binary central stars of planetary nebulae (CSPNe). About 50 binary CSPNe have been hitherto identified in the Galaxy, almost half of them were detected in the OGLE database. We used the OGLE data to search for binary CSPNe in the Large Magellanic Cloud (LMC). I will present the results of our hunting, and then I will make a comparison of period distribution and the binary fraction of binary CSPNe between LMC and Galactic objects.

Keywords: planetary nebulae, PNe, binary central stars of PNe, binaries, LMC, Large Magellanic Cloud

*Speaker

†Corresponding author: seyfert@ncac.torun.pl