

Abstract Submitted
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Compact Binaries in Globular Clusters MANUEL PICHARDO

MARCANO, Texas Tech University — Globular clusters are very old groups of stars. Due to their age and the gravitational interactions dominating the dynamics of the clusters, they are home to a significant fraction of compact binaries. The formation and evolution of these kinds of binaries is still not completely understood. Using MUSE and Hubble archival data we plan to characterize the compact binary population in them. With MUSE in the cluster NGC 6397, we have been able so far to spectroscopically confirm two new CV candidates as well as retrieve higher quality spectra of the four previously identified CVs and of a candidate millisecond pulsar (MSP). With Hubble archival data we have been able to recover the period for the brightest CVs, as well as for the MSP candidate. The found 1.9 days period for the MSP, suggest that it is a new redback pulsar candidate. Altogether we have demonstrated how an IFU like MUSE, and archival data from Hubble can be used to efficiently study the population of compact objects in globular clusters.

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