

Proposal Abstract:

Globular Cluster M15, one of the oldest core-collapsed clusters, contains 13 known pulsars in it. Among them, several stand out as particularly noteworthy. M15G is a very faint pulsar, has only been detected once after the 1990s, and its timing solution was not updated for decades; M15C is likely under spin axis precessing, showing a continuous decrease in its flux and significant changes in its (polarized) profile; M15I is potentially a binary pulsar with the longest orbital period in all core-collapsed GCs; M15K and M15L are isolated slow pulsars, their spin period rank the 1st and 3rd slowest in all GC pulsars, respectively. They could be partially recycled or formed by different types of core-collapse mechanisms. To unravel those crucial information and provide more knowledge for the studies of exotic GC pulsars, we propose further observations of Globular Cluster M15.