

Proposal Abstract:

We wish to observe thirteen binary neutron star systems in the FAST sky region and search for companion's signal in systems with short orbital periods, in especially the decreasing luminosity of M15C (B2127+11C), which suggests that M15C is in motion. Continuous observations of M15C are therefore essential to try to detect potential signals from the M15C companion. We hope to track it for a long period of time to search for its companion. In addition, we have not found observations of J1759+5036 in the archive, and we would like to observe it and study it systematically. For a system with a long orbital period, we would like to track and observe it, search for a companion, and study the span of the linear polarization at the same time. In order to avoid the interference of the main star's signal, we will block out the main star's signal by presto before searching, which will increase the probability of seeing the companion's signal.