Proposal Abstract:

Twenty-one neutron star binaries were identified from LAMOST and APOGEE spectroscopic data and Gaia astrometric data. They have orbiting periods ranging from 0.6 to 1254 days with visible companions of white dwarfs, main-sequence stars and giants. We propose to search for radio pulses from these systems. With the radio pulses, binary parameters can be precisely measured. Together with optical measurements, spin-orbit interaction, models of binary formation, structure and evolution theories will be tested (Note: Fifteen sources do not occupy Galactic plane observing time.)