

Proposal Abstract:

The FAST GPPS survey has discovered 17 long-period pulsars, with a period of > 3 seconds. Such long-period pulsars could be magnetars with ultra-strong magnetic fields or weak magnetic fields near the death line. The only chance to distinguish them is to do pulsar timing for these pulsars, measuring the period derivatives, so that their locations in the P-Pdot diagram can be determined and their magnetic field and characteristic ages can be determined as well. Here we apply 78.7 hours of FAST observation for timing 17 long-period pulsars.