

Proposal Abstract:

We searched for single pulses in the data collected by the Galactic Plane Pulsar Snapshot (GPPS) survey using the FAST telescope and identified 51 new transient sources showing as radio bursts. Their dispersion measures are less than the model-predicted contributions from the Milky Way, and hence they are the Galactic transient sources. However, due to the limited number of single pulses detected from these sources, we have not been able to determine if they are RRATs and then their rotation periods. We apply the FAST to do extensive tracking observations to find more single pulses of them so that we can search their rotation periods and determine if these sources are extremely nulling pulsars, RRATs, or even the Galactic FRBs.