NO: PT2023_0127

Proposal Abstract:

The CRAFTS pulsar seurvey has discovered new pulsars with interesting properties. Some of them still remain in lack of detailed single pulse analysis. Their full polarization information was not obtained, either. This time, we have selected 8 pulsars near the death line in period vs. period-derivative diagram which have relatively long periods therefore are more likely to show interesting time-domain features. Some of them has already shown features like nulling or amplitude modulation. We propose to observe each source twice and one hour for each time. The single pulse study of these pulsars will help us understand the emission mechanism of neutron stars and expand the CRAFTS discovery. They may rule out some current models as they are close to or have crossed the predicted death line.