NO: PT2024_0268

Proposal Abstract:

Our first scientific propose is to observe FRB sources that has been found to repeat by CHIME recently, among which we focus on repeaters with more counts and those observed to be repeating in the past few months. Through these observations, we search for potential active epoch of these repeaters. We require attention to these repeaters that haven't been systematically studied by FAST like FRB 20190417A. More observations are needed eagerly. Secondly, we require more observations to FRB 20240114A, independent of FAST's weekly monitoring. Our scientific goal is to use our FAST data processing pipeline to perform flux and polarization calibration and try to find underlying quasi-periodic oscillations (QPOs), which may give us clues about the origin of FRBs. Additionally, we will compare the results with our single-pulse researches on other radio sources to study their morphology properties and potential commonalities. We also wish to study the scintillation structures of FRB 20240114A, if the result permits.