PID:PT2022 0043

Abstract:

In the CRAFTS survey, we discovered several dispersed single pulses. Some of them are clearly FRBs. In this proposal, we would like to observe these targets to identify the slow pulsars behind them or potential repeating FRBs. The single pulses were discovered in the CRAFTS drift-scan survey. Some slow pulsars may only be detected with a few pulses with seconds of beam-crossing time. In this case, we could not identify their period, which could be very long. The longest pulsar period is ~23s. With its unique strength of sensitivity, FAST may discover even slower pulsars through single pulses. We also include in this proposal two high-DM FRBs discovered in CRAFTS (one 1812 and another 2554 cm pc^-3). If identified as repeaters, they would be the highest DM repeating FRB and will be an extraordinarily important extra sample for the FRB family. The total of 6 sources listed requires 17.6 hours.