

**Proposal Abstract:**

FRB 121102 is the first detected repeating FRB source. We have been monitoring the source through FRB-KSP and more than 500 bursts were detected during the active episodes from August to October 2022 and January to March 2023. We detected a significant DM decrease, which breaks the slowly rising trend observed in FRB 121102's DM between 2012 to 2019. The RM was derived from a polarized pulse and revealed a 70% decrease compared to previous observations, thus further demonstrating the ongoing decline. Investigating the decline pattern of RM and the evolutionary trend of DM could offer valuable insights into the origin of FRBs. Meanwhile, we also detected narrow pulses of FRB 121102 with a level of sub-microseconds. Searching narrow pulses from data with higher temporal resolutions will enable the exploration of the most extreme bursts. In this proposal, we propose to monitor the on-off period of the source in the long term. Specifically, we propose to focus on extreme episodes, as a complement to FRB-KSP. We propose to track the follow-up evolution of DM and RM and search for extreme narrow pulses from FRB 121102. The observation will provide insights into the origin and radiation mechanism of FRBs.