

Proposal Abstract:

Magnetar is a class of neutron stars with extremely high surface magnetic fields. Among over 30 magnetars in the McGill magnetar catalog, only 6 have been confirmed to exhibit radio emissions, with more radio observations aiding in understanding the radiation mechanisms of magnetars. The discovery of megajansky radio burst FRB 20200428A from a galactic magnetar SGR 1935+2154 indicates that magnetars are potential progenitors for fast radio bursts. Searching for more radio emissions from magnetars is of significant importance for studying the connection between FRBs and magnetars. Here we propose to monitor three magnetars that have never been observed by FAST. The observations of magnetars will provide valuable information for understanding the connection between magnetars and the origin of FRBs.