

PID:PT2022_0123

Abstract:

We propose the FAST observation of Globular Cluster (GC) NGC6749. Since the discoveries of NGC6749A and B (Hessels et al. 2007), till now this GC can still be the one with lowest concentration and the third lowest central luminosity density of any GCs with known pulsars. The pulsars in this GC would help to test the star evolution and the dynamics. The timing to NGC6517A would help understand such a black-widow-like system. The possible detection to NGC6749B would help explain why it was missing since discovered. With the high sensitivity, FAST is no doubt the suitable telescope for timing the faint NGC6749A, catching the possible pulsar NGC6749B, and search for new pulsars.