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Proposal Abstract:

We propose the FAST observations on three Globular Clusters (GCs) including NGC6539, NGC6749 and NGC6760, aiming to search for new pulsars and obtaining the phase-connected timing solutions of pulsars in these GCs. All three of these clusters have pulsar discoveries, so the dispersion measure range is estimable, which greatly increases the chance that we will find new pulsars in them. Since the discovery of the four pulsars in these three GCs, three of which are binary systems, their phase-connected timing solution has not been updated for more than a decade until now. In particular, the update timing of NGC6760A would help understand such a black-widow-like system. With the high sensitivity, FAST is certainly the proper telescope to search for new pulsars.