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Abstract:

We propose for FAST deep observations to the Globular Clusters (GC) in the southern sky. Previous FAST observations show much higher discovery rate in some selected southern sky GCs, and more than 2/3 FAST-discovered GC pulsars are discovered in these GCs. In this proposal, we carefully selected 5 GCs, including M107, M72, Pal11, NGC6539, and NGC6366. They are relatively close to earth ( $< 20$  kpc), and including few pulsars (only NGC6539A). Based on the hyper sensitivity of FAST, we aim to either detect new pulsars or give uplimits of flux of pulsars in these clusters.