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Abstract:

We propose the monitoring observations on pulsars in the Globular Cluster (GC) M15 to finish the work of their timing solutions, and search for more pulsars. Pulsars in M15 are previously discovered pulsars M15A to H and newly discovered M15I (Pan, et al. 2021). Among them, M15C is in a pulsar-neutron star binary system and likely showing some characteristics of relativistic spin precession. Other pulsars are isolated expect for M15I, which is not confirmed yet. In our previous pulsar searching, M15A to F and H had been found. Their timing solutions made by Arecibo haven't been updated since 1990s (Anderson. 1992). We believe that with FAST we should have higher detection rates of M15 pulsars. With more FAST detection on M15 pulsars, we can obtain or update the timing solutions which will be the important information for further studies on M15 and pulsars in it. So we propose for more observations on M15, to obtain the timing solutions for M15 pulsars, learn more about M15C / M15I and try to find more pulsars.