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Abstract:

Despite of numerous pulsar surveys, no radio pulsars have been discovered in galaxies further than the Magellanic Clouds. Young SNRs close to our galaxy which host Crab-like pulsars should have a priority to be checked. We propose to observe two extreme SNRs which might host Crab-like pulsars within 1\,Mpc and further than the Magellanic Clouds. Assuming they have giant pulses 100 times weaker than the Crab pulsar, we show that these pulses can be detected significantly by FAST with a reasonable observation time. Previous Arecibo observations have discovered a single pulse event in the direction of one of them. If we can detect more repeated single pulse events from them, a more stringent constraint can be put on the pulsars inside these two SNRs.