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Abstract:

We discovered nine pulsar candidates in the FAST pulsar survey (PT2020_0141). Now we propose to carry out timing and confirmation of these pulsar candidates. Four of our candidates are highly significant, one year of timing monitoring will enable us to estimate the parameters of these pulsars, such as position, proper motion, spin-down rate, surface magnetic field, characteristic age, etc. These information are crucial for us to understand the pulsar population at intermediate latitudes and guide future surveys. The other candidates, although less significant, have short spin periods and are likely in binary systems. FAST observations will allow to confirm these discoveries and potentially identify some interesting systems.