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Abstract:

Pulsars are very good astrophysics laboratories in extreme conditions. High precision pulsar timing observation enables us to study the origin, evolution and internal physics of pulsars. This proposal mainly aims to achieve the following three scientific objectives: (1) using the high sensitivity of FAST to detect whether there are has micro emission changes before and after the glitch; (2) accumulating more large glitches to estimate the mass of pulsars; (3) as an adjunct of the first two scientific objectives, we can obtain their rotation parameters and astrometric parameters to trace the origin and evolution of pulsars. The ultra-high sensitivity of FAST provides us with a very good opportunity to study these scientific goals.