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Abstract:

We found many quasi-periodic multi-peak structures (Niu et al. in prep) in the FAST observation of the repeating fast radio burst FRB20201124A. Similar micro-structures are also seen in pulsars. We would like to examine the connection between the micro-structures of pulsars and FRB by observing a few selected pulsars in baseband mode, such as quasi-periodicity, polarization and frequency evolution. We want to use the coherent dedispersion technique to achieve extra high time resolution to detect ultra-fine microstructures on the unprecedented sub-millisecond levels. The total of 6 sources requires 2 hours of on-source observing time and 1 hour plus 10 minutes overhead for each observation.