Proposal Abstract:

This is the next stage of the 2022 "FAST Science Observing Proposals" project, led by a UCAS Ph.D. student. In the previous science projects (PT2022_0013), we had proposed 40 hours for timing of 7 new pulsars and 12 timed binary systems discovered by Commensal Radio Astronomy FAST Survey (CRAFTS). Until now, we have solved 5 of 7 newly discovered pulsars and finished the timing of 12 binary systems. We found that there are 3 pulsar binary systems and 2 isolated pulsars. Here, we propose a new timing campaign to continue the monitoring of these 3 newly solved binary systems, 2 unsolved pulsars and 1 double neutron star (DNS) system with less observing cadence than before. With this timing campaign, we can conduct the phase connected timing ephemeris of these 6 pulsars, and could publish the results soon. We are applying for 24 hours to timing 6 millisecond pulsars.