Proposal Abstract:

PSRs PSRs J0435+3222 and J1403+1306 are interesting sources for follow-up timing observations. As the youngest binary millisecond pulsar (1.2 million years), J0435+3233 is far beyond the maximum spin-up line, and the spin-down rate is the highest among known millisecond pulsars according to initial data. J0435+3233 will place stringent constraints on the spin-up process predicted by pulsar recycling theories. In the recycling theories. In addition, J0435+3233 may be a triple star system with an inner system. It was derived that the third object perhaps has an orbit greater than 2700 days and a companion mass of about 3.4 Jupiter masses. Follow-up timing observations are significant for identifying the third object, studying pulsar evolution, and achieving precision measurement in the second spin frequency derivative. J1403+1306's spin-down rate is close to J0435+3222. These spin-down rates, if confirmed, will place stringent constraints on the spin-up process predicted by pulsar recycling theories.