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**High-cadence Timing of Radio Pulsars with CHIME**

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The timing of radio pulsars – rotating neutron stars that emit beamed radiation observed as periodic pulsations – is a uniquely powerful technique for probing fundamental aspects of physics in extreme environments. Global pulsar-timing efforts include the eventual detection of gravitational radiation at nanohertz frequencies, observations of general-relativistic effects for testing gravitation and nuclear astrophysics, as well as monitoring the turbulent properties of the Galactic interstellar medium. Most premier single-dish observatories only observe a small fraction of the known pulsar population with several-month cadences due to limited and competitive resources. In this talk, I will describe the development and ongoing operation of a pulsar-timing backend constructed for the Canadian Hydrogen Intensity Mapping Experiment (CHIME), which observes up to 10 different sky positions at any instant in time and can observe all Northern pulsars within a several-week timespan. I will overview recent and preliminary science results made possible by the daily cadence of observations achievable with the CHIME telescope and its pulsar timing backend.