

Abstract Submitted  
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**Observations of the Guitar Nebula Pulsar with the Green Bank Telescope and the Long-Wavelength Array** LAURA SALO, TIMOTHY DOLCH, Hillsdale College, KEVIN STOVALL, National Radio Astronomy Observatory, SHAMI CHATTERJEE, JAMES CORDES, Cornell University, PAUL DEMOREST, National Radio Astronomy Observatory, MAURA MCLAUGHLIN, West Virginia University, DANIEL STINEBRING, Oberlin College, CODY JESSUP, Hillsdale College — Simultaneous observations of the Guitar Nebula pulsar using two different telescopes, the Green Bank Telescope (GBT) and the Long Wavelength Array (LWA), provided the opportunity to study the correlation of events at different frequencies. We report on single pulse properties in the GBT data. Using data from both telescopes, we find dispersion measure (DM) variations using several methods. We calculate the spatial scales over which interstellar medium density fluctuations occur. The multi-frequency observations provide a good test case as the North American Nanohertz Observatory for Gravitational Waves (NANOGrav) pulsar timing array collaboration moves toward ultra-wideband receivers.

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