

# Department of Physics Colloquium



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## Building a Galactic Scale Gravitational Wave Observatory

For the better part of the last decade, the North American Nanohertz Observatory for Gravitational Waves (NANOGrav) has been using the Green Bank and Arecibo radio telescopes to monitor millisecond pulsars. NANOGrav aims to directly detect low-frequency gravitational waves which cause small changes to the times of arrival of radio pulses. In this talk I will discuss the work of the NANOGrav collaboration and our sensitivity to gravitational waves from astrophysical sources. I will show that a detection is possible in the next few years.



WISCONSIN

**Friday, October 9, 2015**

3:30 pm | 2241 Chamberlin Hall

Coffee & Cookies at 3:15 pm