## NRAO/Socorro Colloquium Series

## **Xavier Siemens**

University of Wisconsin - Madison

## **Building a galactic scale gravitational wave observatory**

## Abstract

For 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.

November 20, 2015

11:00 am

**Array Operations Center Auditorium** 

All NRAO employees are invited to attend via video, available in Charlottesville Auditorium, Green Bank Auditorium, and VLA Video Conference Room.