

Friday, October 13, 2017
4:10 – 5:00 PM

The Problems with Einstein's Gravity

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<http://www.physics.montana.edu/people/faculty/yunes-nicolas.html>

<http://www.physics.montana.edu/gravity/index.html>

<http://www.montana.edu/xgi/>

<http://www.physics.montana.edu/research/astrophysics/astro-msu.html>

Abstract:

Einstein taught us that gravity is nothing but the curvature of a continuum dubbed "spacetime." His theory has led to many wonders, including the prediction of the existence of black holes and neutron stars, their collisions and the generation of gravitational waves, vibrations in the very fabric of spacetime. Einstein's theory of General Relativity, however, is incomplete from a theoretical standpoint (for example lacking a description of singularities) and an observational standpoint (for example lacking an explanation for the late-time acceleration of the universe). In this talk, I will review some of these outstanding problems and describe current and future advances in our understanding of Einstein's theory through the observation of gravitational waves.

Host: Rufus Cone

** Refreshments served in the Barnard Alcove opposite Barnard 258 at 3:45 **