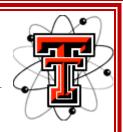


## Physics & Astronomy Colloquium - Spring 2019



Tuesday, Feb 12<sup>th</sup> at 3:30 pm in SC 234

## Dr. Jonelle Walsh

Texas A&M University

## The Supermassive Black Hole - Galaxy Connection

Over the past 15 years it has become increasingly clear that supermassive (greater than a million solar mass) black holes are essential components of galaxies, as demonstrated by the empirical correlations connecting black hole masses and largescale galaxy properties. Although about ~100 dynamical black hole mass measurements have been made to date, the local black hole mass census is highly incomplete. Gaining a more complete picture of black hole demographics and a deeper understanding of the mechanisms that drive black hole/galaxy evolution requires the measurement of black holes in a wider range of galaxy types with diverse evolutionary histories. In this talk, I will discuss the measurement of black holes in an exciting population of local galaxies that show remarkable similarities to galaxies observed at earlier epochs in the Universe. I will also describe a Gemini Large and Long Program aimed at addressing a bias in the types of galaxies for which dynamical black hole mass measurements have been made.

Refreshments at 3:00 pm in SC 103