

## PHYSICS AND ASTRONOMY SEMINAR

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## "The Milky Way Galaxy: Inferring The Dark Matter from the Light"

## Abstract

Although there is consensus that the Galaxy's mass is dominated by its dark matter halo, the exact value of its mass is poorly constrained. The underlying reason for this is that there are serious challenges associated with using the motions of tracer particles like globular clusters or halo stars to deduce the mass profile; the 3D velocity measurements are often incomplete and uncertain, and there are only a few GCs at large distances from the Galactic center. In this talk, I will explain a hierarchical Bayesian method we have developed to help deal with these challenges, and will show our latest results for the mass of the Milky Way.

Friday, September 9, 2016 10:30 a.m. MacLaurin Building Room D107