



# PHYSICS AND ASTRONOMY SEMINAR

**Dr. Justin Read**

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**“Near-field cosmology with dwarf galaxies”**

## Abstract

Recent numerical models suggest that dark matter is "heated up" in dwarf galaxies due to stellar feedback. These models give an excellent match to the HI rotation curves of isolated field dwarf galaxies, implying a dark matter halo mass in excellent agreement with abundance matching in  $\Lambda$ CDM. These same models predict that satellite dwarfs that had their star formation shut down on infall to the Milky Way should be cuspy. In this talk, I will apply a new non-parametric Jeans code — GravSphere — to the Milky Way classical dwarfs to test this theoretical expectation, and hunt for the first direct evidence for dark matter heating.

**Tuesday, August 1, 2017**

**2:00 p.m.**

**Engineering/Computer Science Building**

**Room 108**