

**Physics Department - University of South Alabama** Presents the AAS Shapley Colloquium Speaker



**Dr. Sheila Kannappan** University of North Carolina at Chapel Hill

> **Thursday, April 14, 2016** 4:00-5:00 P.M. ILB 250



## Dark Matter Puzzles and the "Gastrophysics" of Dwarf Galaxies

I will discuss a set of puzzles left unsolved by standard theories of dark matter, involving critical discrepancies between the predicted and observed dwarf galaxy inventory. Drawing on recent observational and theoretical results, I will argue that the "gastrophysics" of normal matter may underlie these discrepancies. Specifically, the observability and even existence of dark matter structures may depend sensitively on how dwarf galaxies within them acquire fresh gas, consume gas to form stars, and lose gas to their surroundings.

The colloquium is supported by the American Astronomical Society

Refreshments are served at 3:45 P.M.