Contribution ID: **265** Type: **Talk**

Model-independent constraints on dark matter annihilation in dwarf spheroidal galaxies

Monday 27 August 2018 15:15 (15 minutes)

Dwarf spheroidal galaxies are are exceptionally clean targets for searches for gamma rays from dark matter annihilation. Here, I will discuss a general, model-independent formalism for determining bounds on the production of photons from dark matter annihilation in dwarf spheroidal galaxies. This formalism is applicable to any set of assumptions about dark matter particle physics or astrophysics. As an illustration, I'll present an analysis of gamma-ray data from the Fermi Large Area Telescope, which can be used to derive constraints on a variety of nonstandard dark matter models, several of which have not previously been studied in the context of dwarf galaxy searches.

Primary author: SANDICK, Pearl (University of Utah)

Presenter: SANDICK, Pearl (University of Utah)

Session Classification: Dark Matter

Track Classification: Dark Matter