



Contribution ID: 396

Type: not specified

A search for dark matter annihilation in the newly discovered dwarf galaxy Reticulum 2

Tuesday, August 4, 2015 4:00 PM (15 minutes)

I will present results from a search for gamma-ray emission in nine Milky Way satellites recently discovered in the Dark Energy Survey. The nearest of these, Reticulum 2, shows evidence for a signal in public Fermi data. The detected emission is consistent with annihilating dark matter with a particle mass less than a few hundred GeV. Different ways of treating the background yield different significances – ranging from 2.3 sigma to greater than 3.7 sigma (after trials) – and I will discuss the caveats involved. I will discuss tests that any dark matter interpretation must pass.

Oral or Poster Presentation

Oral

Primary author: GERINGER-SAMETH, Alex (Carnegie Mellon University)

Presenter: GERINGER-SAMETH, Alex (Carnegie Mellon University)

Session Classification: AstroParticle, Cosmology, Dark Matter Searches, and CMB

Track Classification: Cosmology and Dark Matter Experiment