

# Indirect Dark Matter Searches with the HAWC Observatory

*Monday, 27 August 2018 14:40 (20 minutes)*

TeV photons provide unique tests of fundamental physics phenomena, such as dark matter annihilation and decay. The High Altitude Water Cherenkov (HAWC) Observatory is an extensive air shower array sensitive to gamma rays from 500 GeV - 100 TeV. HAWC is capable of performing indirect dark matter searches in a mass range that is inaccessible to most other experiments. The HAWC wide field-of-view enables dark matter searches in hundreds of potential sources across the Northern sky. Here, we present dark matter annihilation and decay limits from dwarf galaxies, the Milky Way Galactic halo, the M31 galaxy, and the Virgo Cluster.

**Primary author:** HARDING, Pat (Los Alamos National Laboratory)

**Presenter:** HARDING, Pat (Los Alamos National Laboratory)

**Session Classification:** Dark Matter

**Track Classification:** Dark Matter