



Contribution ID: 13

Type: **not specified**

## **An Indirect Detection Source Comparison Case Study: The Galactic Center and The Fornax Galaxy Cluster**

*Monday, 13 May 2013 14:18 (18 minutes)*

It is likely that observation of dark matter annihilation radiation will be made from the source that provides the largest signal to noise ratio. It is desirable, however, that dark matter annihilation radiation be seen from multiple sources. Not only would it provide independent verification of the phenomenon, but it would break degeneracies in uncertainties inherent with calculations of the signal predictions. This talk presents a case study that compares the annihilation from the center of our galaxy to the signal from the Fornax cluster of galaxies. X-ray observations of Fornax are shown to constrain its halo profile. The IceCube experiment may use its galactic center analysis methods to also search for dark matter annihilation from the Fornax cluster.

**Primary author:** CAMPBELL, Sheldon (The Ohio State University)

**Presenter:** CAMPBELL, Sheldon (The Ohio State University)

**Session Classification:** Dark Matter Theory / Experiments I

**Track Classification:** Dark Matter (Theory/Experiment) Parallel