



Contribution ID: 21

Type: **not specified**

## **Eridanus IV: an Ultra-Faint Dwarf Galaxy Candidate Discovered in the DECam Local Volume Exploration Survey**

*Monday, 16 August 2021 10:45 (15 minutes)*

We overview efforts to search for undiscovered satellites of the Milky Way in photometric data from the DECam Local Volume Exploration survey (DELVE), and present our recent discovery of a candidate ultra-faint Milky Way satellite, Eridanus IV. Eridanus IV is a faint, extended, and elliptical system with a stellar population that is well-described by an old, metal-poor isochrone. These properties are consistent with the known population of ultra-faint Milky Way satellite galaxies. Eridanus IV is also prominently detected using proper motion measurements from Gaia Early Data Release 3. We highlight a range of interesting avenues for future study of this system with deeper photometric and spectroscopic data.

**Primary author:** CERNY, William

**Presenter:** CERNY, William

**Session Classification:** Monday