

Abstract Submitted
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The Jet Stream In DELVE PETER FERGUSON, Texas AM University, DELVE COLLABORATION — We are in an exciting era of Milky Way astronomy where many large survey datasets are helping to explore and understand the structure and substructure of our Galaxy. The DECam Local Volume Exploration (DELVE) survey is one such dataset. The first data release DELVE-DR1 provides photometric measurements of ~ 520 million astronomical sources covering $\sim 5,000\text{deg}^2$. We use this catalog to search for stellar streams around the Milky Way. Stellar streams are the results of tidal interactions between an infalling satellite galaxies/globular clusters and the Milky Way. They form long linear coherent structures spanning 10s of degrees across the sky. By identifying and characterizing these objects we can learn about the accretion history of our Galaxy, the gravitational potential in their vicinity, and probe for dark matter structures that may have perturbed the stream on small scales. In this talk I will discuss our results using photometry from DELVE and proper motions from *Gaia* to characterize the Jet stream. Finding an extended length of the stream, and measuring for the first time a distance gradient, proper motion, and intensity variations along the stream. Adding jet to the population of well characterized stellar streams.

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