

Abstract Submitted  
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**Studying Markarian 421 with VERITAS** ETHAN RINCK<sup>1</sup>, Cal State University East Bay , VERITAS TEAM — Markarian 421 is a BL Lac-type active galaxy that is located in the direction of the Ursa Major constellation at a redshift of  $z = 0.03$  (e.g. 122 megaparsecs). The source is one of the closest objects of its type and has been known to be a strong source of very high-energy gamma rays since 1992. The Very Energetic Radiation Imaging Telescope Array System (VERITAS), which is made up of four 12 meter imaging atmospheric Cherenkov telescopes located at the Fred Lawrence Whipple Observatory in southern Arizona, has been studying Markarian 421 since 2007. The poster will describe a brief theory of how the gamma-ray emission from Markarian 421 might be produced, how VERITAS detects gamma rays from the ground, and describe the VERITAS dataset of Markarian 421 over the last 9 years.

<sup>1</sup>Student

Ethan Rinck  
Cal State University East Bay

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