

---

# VERITAS Observations of Globular Clusters

Contributed by Michael McCutcheon, for the VERITAS Collaboration  
Tuesday, 28 July 2009

arXiv:0907.4974

It has been postulated that globular clusters could be sources of Very-High Energy (VHE) gamma rays, powered by millisecond pulsars. This could be due to cumulative direct emission or to plerion-type emission driven by colliding winds. In particular the southern hemisphere globular cluster 47 Tuc has been singled out as a potential source in both models. In light of the recent detection by the Fermi Gamma-ray Space Telescope (FGST) of 47 Tuc, the first detection of any globular cluster as a gamma-ray source, we present the results of observations of northern hemisphere globular clusters by VERITAS. Three globular clusters have been observed: M15, M13 and M5. Of these, M15 and M13 have been explicitly proposed as VHE gamma-ray sources and M5 possess similarities with them.