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Gamma-ray Observations of Extragalactic Particle Accelerators HENRIC KRAWCZYNSKI, Washington University in St. Louis

With the ground based VERITAS, MAGIC, MILAGRO, and HESS experiments and the upcoming space-borne GLAST observatory, we now have access to a powerful suite of telescopes to probe high-energy particle populations in a wide range of astrophysical systems. In this contribution, I discuss the science topics that can be addressed with observations of high-energy particles accelerated close to supermassive black holes, in normal and starburst galaxies, and by large scale structure formation shocks. Furthermore, I will highlight recent results obtained with ground based gamma-ray telescopes.