

Recent Scientific Results from VERITAS

Thursday 28 August 2025 14:00 (25 minutes)

VERITAS is a ground-based gamma-ray observatory designed to detect astrophysical very-high-energy (VHE; $100 \text{ GeV} < E < 30 \text{ TeV}$) gamma rays. It consists of an array of four 12-meter imaging atmospheric Cherenkov telescopes (IACTs) located in southern Arizona, USA. Since VERITAS was placed into operations nearly two decades ago, the observatory has played a central role in investigating both Galactic and extragalactic VHE phenomena. Its observations include, but are not limited to, supernova remnants, pulsar wind nebulae such as MGRO J1908+06 and pulsar halos, X-ray binaries, as well as extragalactic sources including the starburst galaxy M82, active galactic nuclei such as the nearby elliptical galaxy M87, blazars such as 1ES 1028+511, radio galaxies, and fast radio bursts. The facility has also contributed significantly to the field of multimessenger astrophysics, with results ranging from constraints on dark matter from dwarf spheroidal galaxies to target-of-opportunity searches to astrophysical neutrinos, such as TXS 0506+056, and follow-ups of gravitational wave events. This presentation will showcase recent developments from the VERITAS science program and highlight key discoveries.

Collaboration you are representing

VERITAS

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