

The Ultra-High-Energy Source MGRO J1908+06

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The TeV gamma-ray source MGRO J1908+06 is one of the highest-energy sources known, with observed emission by the High Altitude Water Cherenkov (HAWC) Observatory extending well past 100 TeV. The source exhibits both energy-dependent morphology and a spatially-dependent spectral index. The emission is likely to be dominantly leptonic, and associated with the radio-quiet PSR J1907+0602. However, one-population models do not describe the data well; a second particle population is needed to explain the shape of the spectral energy distribution at the highest energies. This component can be well-described by either leptonic or hadronic hypotheses. We discuss this feature and implications for detection by multi-wavelength and multi-messenger experiments.

Keywords

TeV gamma rays, PWN, multi-messenger, HAWC

Collaboration

HAWC

other Collaboration

Subcategory

Experimental Results

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