

Abstract Submitted
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The gamma-ray sky above 50 TeV with the HAWC Observatory

KELLY MALONE, Pennsylvania State University, HAWC COLLABORATION — High-energy observations of gamma-ray sources are important probes of cosmic-ray accelerators. The High Altitude Water Cherenkov (HAWC) Observatory, located at an altitude of 4100m in the state of Puebla, Mexico, is designed to study TeV gamma rays from air showers. Each of the 300 water Cherenkov tanks contains 4 PMTs; the entire array covers 22,000 m². Due to its large instantaneous field of view (~ 2 sr) and high duty cycle ($>95\%$), it is well-suited to perform surveys of the entire overhead sky. This includes transient, extended, and diffuse searches. I will present maps of the gamma-ray sky above 50 TeV as seen by HAWC. Observations in this energy range are essential in distinguishing between different particle acceleration models.

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