A HAWC's Eye View on Supernova Remnants

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For the HAWC Collaboration.

Supernova Remnants (SNRs) have long been postulated to be the main sources of Galactic Cosmic Rays (CRs) up to the knee. However, while some SNRs have been shown to be CR accelerators, none of them have been confirmed to accelerate CRs beyond hundreds of TeV. The TeV gamma-ray emission from SNRs provides important information about the maximum energies to which CRs are being accelerated in SNRs.

The High-Altidude Water Cherenkov Observatory (HAWC) is a wide field-of-view TeV gamma-ray survey observatory continuously observing the northern gamma-ray sky. In this presentation, we will give an overview of recent measurements of VHE gamma-ray emission from SNRs with HAWC. Special emphasis will be given to modeling the GeV-TeV gamma-ray emission from the gamma Cygni SNR, a middle-aged SNR in the Cygnus region.

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