H.E.S.S. Highlights from the Galactic Plane

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Abstract

The High Energy Stereoscopic System (H.E.S.S.) is an array of five imaging atmospheric Cherenkov telescopes located in the Khomas Highlands of Namibia sensitive to gamma-ray emission from tens of GeV up to several tens of TeV. In the 20 years since its construction, its stereoscopic observations have provided an unprecedented view of both Galactic and extragalactic gamma-ray sources in the Southern hemisphere, revealing a surprisingly rich population of TeV emitters along the Galactic Plane. This population includes a variety of astrophysical objects, from pulsar wind nebulae, supernova remnants, gamma-ray binaries, stellar clusters, and other particle accelerators. Some of these discoveries were made possible through very deep exposure coupled with advanced analysis techniques, which help pave the road for the Cherenkov Telescope Array Observatory (CTAO) era. In this talk, I will present recent scientific highlights from H.E.S.S. focusing on sources in the Galactic Plane.

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