PAiP-2025 conference "Particle Astrophysics in Poland"



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Latest Results from the High Energy Stereoscopic System (H.E.S.S.)

Saturday, 22 February 2025 09:30 (20 minutes)

The High Energy Stereoscopic System (H.E.S.S.), a ground-based gamma-ray observatory, has been instrumental in advancing our understanding of high-energy astrophysical phenomena. This presentation will highlight the most recent scientific results obtained using H.E.S.S., focusing on its contributions to the study of cosmic particle accelerators. I will discuss key discoveries, including spectral and spatial analyses of gamma-ray sources together with multi-wavelength and multi-messenger data.

In addition, the presentation will provide an overview of the observatory's plans for operations and research activities beyond 2025. This will include the legacy program, potential new science targets, and the observatory's continued role in multi-wavelength and multi-messenger astrophysics. These findings and future plans underscore H.E.S.S's significant role in particle astrophysics and its ongoing contributions to advancing our understanding of the high-energy universe.

Primary author: MODERSKI, Rafał (Centrum Astronomiczne im. M. Kopernika PAN)
Presenter: MODERSKI, Rafał (Centrum Astronomiczne im. M. Kopernika PAN)
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