Highlights from H.E.S.S.

CHRISTIAN STEGMANN$^1$ FOR THE H.E.S.S. EXPERIMENT

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Abstract: The H.E.S.S. collaboration continues to contribute significantly to the rapidly progressing field of ground-based gamma-ray astronomy with photon energies above 100 GeV. H.E.S.S. discovered of the order of 60 gamma-ray sources (70 sources) and new sources are being discovered in archival data or ongoing observations. Recent results cover physics topics ranging from the acceleration of cosmic rays in supernova remnants, the interaction of cosmic rays with molecular clouds, acceleration and emission processes in binary systems, physics of relativistic flows in pulsar wind nebulae and extra-galactic objects like AGN or radio galaxies to exotic physics like the search for axions. The potential of the experiment to deepen the understanding of already established gamma-ray sources and to discover new source classes or study phenomena like GRBs is enlarged by the commissioning of the largest Cherenkov telescope worldwide with a mirror diameter of 28m. We present an overview of recent results with a focus on the physics impact of H.E.S.S. results.

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Not available.