

The cosmic-ray electron spectrum measured with H.E.S.S.

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The measurement of very-high-energy cosmic-ray electrons is intrinsically difficult due to their very steep spectrum with low fluxes and an enormous background of hadronic cosmic rays. The large collection areas needed for such a measurement can be provided by ground-based imaging atmospheric Cherenkov telescopes. The High Energy Stereoscopic System (H.E.S.S.) has performed the first ground-based cosmic-ray electron measurement and thereby extended the measured range of the spectrum to several TeV. Here the H.E.S.S. measurement is presented, as well as an extension of the H.E.S.S. spectrum towards lower energies. At these energies, H.E.S.S. can probe recent ATIC measurements, which have been interpreted in terms of dark matter scenarios.

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