

## Revisiting the starburst galaxy NGC 253 with H.E.S.S.

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NGC 253 is one of only two starburst galaxies that is found to emit  $\gamma$ -rays from hundreds of MeV to multiple TeV energies. An accurate measurement of the GeV and TeV spectra is crucial to determine the underlying particle accelerators, to probe the dominant emission loss mechanism(s) and to probe the importance of cosmic-ray interaction and transport. The precision of the measurement of the  $\gamma$ -ray emission of the starburst galaxy NGC 253 published in 2012 by H.E.S.S. was dominated by the large systematic uncertainties. With the improved understanding of the response functions of the H.E.S.S. experiment, we present an evaluation of systematic uncertainties of the measurement. The spectral analysis is discussed for H.E.S.S. separately as well as in combination with the Fermi-LAT measurement. Compared to the H.E.S.S. publication from 2012, a  $\sim 35\%$  increased flux normalisation is observed with no significant deviation from a power law. The obtained flux parameters are consistent within systematic uncertainties of the previous publication. The results of the combined spectral fit strengthen the conclusions presented in Abramowski et al. (2012). Further details will soon be available in an upcoming publication by the H.E.S.S. Collaboration.

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