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## Study of hadron and gamma-ray acceptance of the MAGIC telescopes: towards an improved background estimation

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The MAGIC telescopes are an array of two imaging atmospheric Cherenkov telescopes (IACTs) studying the gamma ray sky at very high-energies (VHE; E>100 GeV). The observations are performed in stereoscopic mode, with both telescopes pointing at the same position in the sky. Differently from the other running IACTs, the MAGIC field of view (FoV) acceptance for hadrons and gamma rays has a complex shape, which depends on several parameters such as the azimuth and zenith angle of the observations. In the standard MAGIC analysis, the strategy adopted for estimating this acceptance is not optimal in the case of complex FoVs.

In this contribution we present the results of systematic studies intended to characterise the acceptance for the entire FoV. These studies open the possibility to apply improved background estimation methods to the MAGIC data, useful to investigate the morphology of extended or multiple sources.

## Collaboration

MAGIC

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267

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