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## Xeff analysis method optimization to enhance IACTs performances

Tuesday, 4 August 2015 16:00 (1 hour)

The identification of gamma-rays against the dominant background of hadronic cosmic rays is very challenging for Imaging Air Shower Telescopes such as H.E.S.S. Xeff is a multivariate particle classification approach successfully applied to the H.E.S.S. data analysis enabling a significant gain in sensitivity. It is based on the combination of three shower reconstruction methods currently under use: Hillas parameters, semi-analytical analysis (model), and the so called "3D-model". Recently the rejection power of the Xeff method has been increased by introducing the improved model++ reconstruction, refining the set of combined discriminating variables and the classification following observation conditions. The efficiency of this analysis method will be presented by comparing Monte Carlo simulations and real data from a set of published results.

## Collaboration

- not specified -

## Registration number following "ICRC2015-I/"

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