30th International Cosmic Ray Conference



Contribution ID : 925

Type : Poster

A Probability Density Method for VHE Gamma-Ray Source Analysis

Monday, 9 July 2007 14:45 (0:00)

Abstract content

A probability density method for VHE gamma-ray source analysis, applicable to both stand alone IAC telescopes and stereoscopic arrays, is presented here. Developed using simulations and Crab data for the Whipple 10m telescope, the technique covers both two-dimensional image and spectral analyses, and background subtraction is implemented either by a modified standard approach using cuts on Hillas parameters, or by a kernel multivariate analysis. The probabilistic method adopted can also be extended into a log likelihood technique where data characterisitics such as source strength, extension, or multiple sources within the field of view can be determined.

If this papers is presented for a collaboration, please specify the collaboration

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Summary

Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 3 (OG part 2), pages 1489-1492

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Session Classification : Posters 3 + Coffee

Track Classification : OG.2.7