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Recent TeV observations of Mrk 501 with the TACTIC gamma-ray telescope

Abstract content

We have observed the BL Lac object Mrk 501, during the period Feb. 2006 - May 2006 for a total on- source duration of 65 hours using the TACTIC gamma-ray telescope at Mt. Abu Rajasthan India. During these observations the telescope was used in a tracking mode of its operation in order to collect maximum possible data on the source. Detailed analysis of 65 hours of data shows the presence of a significant TeV gamma-ray signal from the source direction with a statistical significance of ˜ 8.3 σ above system threshold energy of 1.5 TeV . We have estimated the differential source spectrum in the energy range 1.5 - 11 TeV which fits well with the power law function of the form fo x E-γ, $\gamma = 2.83 \pm 0.1$ and fo = (2.74 $\pm$0.19) x 10-11 photons /sec cm^2 TeV. Details of data analysis and results so obtained would be presented at the conference.

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

Summary

Reference

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