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Type : **Poster**

Study of the arrival times of cosmic rays

Abstract content

ARGO-YBJ is a full-coverage Extensive Air Shower array, located at 4300 m above sea level and made up of a carpet of Resistive Plate Counters. The time-space pattern allows a detailed reconstruction of showers induced by gamma and charged primaries. Thanks to its high duty-cycle the ARGO-YBJ detector can monitor for long periods the flux of cosmic rays in the energy range from 1 TeV up to 1 PeV. The time differences between consecutive events have been studied in order to check the agreement of their distribution with a Gamma function. The possible bias introduced by the DAQ dead-time has been also investigated. The goal of this analysis is to verify that the arrival times of cosmic rays are uncorrelated, in order to exclude that nearby astrophysical sources or some other unknown effect introduce non-random components in the arrival times.

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

ARGO-YBJ Collaboration

Summary

Reference

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