30th International Cosmic Ray Conference



Contribution ID : 128

Type : Oral

TenTen: An Array of Cherenkov Imaging Telescopes for multi-TeV Gamma-Ray Astronomy in Australia

Monday, 9 July 2007 11:18 (0:12)

Abstract content

The exciting results from H.E.S.S. point to a new population of gamma-ray sources at energies E above 10 TeV, paving the way for future studies and new discoveries in this energy range. Connected with these energies is the origin of particle acceleration to PeV energies and the study of multi-TeV gamma-ray production in a growing number of astrophysical environments. TenTen is a proposed stereoscopic array (located in Australia) of modest-sized (10 to $20m^2$) Cherenkov imaging telescopes with wide field of view (8 to 10 deg diameter) optimised for the E ~10 to 100 TeV range. TenTen will achieve an effective area in excess of 10 km² at energies above 10 TeV. We will outline the motivation of TenTen and summarise key performance parameters from simulations so far.

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

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 1293-1296

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Session Classification : OG 2.7

Track Classification : OG.2.7