Contribution ID : **895** Type : **Poster**

A Wide Angle Air Cherenkov Imaging Telescope

Friday, 6 July 2007 14:45 (0:00)

Abstract content

The existing imaging air Cherenkov Telescopes (IACT) are using imaging cameras of aperture 2-4 degrees. These telescopes have F/0.7 to F/1.2 optics. The best optical resolution that one can obtain with these optical designs is in the range of 3 minutes of arc, and that only in the central region of the imaging camera. There are indications from simulations that one can further improve the sensitivity of the IACTs (the background rejection) if one could provide an improved optical resolution of about 1 minute of arc. The usual prime focus telescopes will need an optical design of F/3 or even slower optics for achieving about 1 minute of arc resolution. In this report we want to show an optical design of a telescope can offer (12-20) degree wide field of view (FoV) and an optical resolution of one minute of arc everywhere in the field of view. The advantages and the drawbacks of the wide FoV telescopes will be discussed.

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. 5 (HE part 2), pages 1061-1064

Primary author(s) : Dr. MIRZOYAN, Razmick (Max-Planck-Institute for Physics)

Co-author(s) : Dr. ANDERSEN, Michael (Astrophysics Institute Potsdam)

Presenter(s) : Dr. MIRZOYAN, Razmick (Max-Planck-Institute for Physics)

Session Classification : Posters 2 + Coffee

Track Classification : HE.1.5