## 30th International Cosmic Ray Conference



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# Study of discrimination between cosmic gamma rays and protons at multi-TeV energies with the Tibet air shower array

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#### **Abstract content**

The Tibet air shower array, consisting of 533 scintillation counters which are placed in a lattice with 7.5 m spacing, has been in operation since 1999 at Yangbajing in Tibet, China at an altitude of 4,300 m above sea level. We found a modest discrimination between gamma- and proton-initiated air showers based on air shower profiles observed by the Tibet air shower array. This method is applied to the Crab Nebula as the standard gamma-ray source in the northern sky and excesses of anisotropy components, such as Tail-In region and the Cygnus arm direction, in multi-TeV energies. Further, we will try to judge whether these excesses are of gamma or proton origin, comparing our data between before discrimination and after discrimination.

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

The Tibet ASgamma 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 1493-1494

**Primary author(s):** Dr. KAWATA, Kazumasa (Institute for Cosmic Ray Research, University of Tokyo); Dr. TAKITA, Masato (Institute for Cosmic Ray Research, University of Tokyo)

Presenter(s): Dr. TAKITA, Masato (Institute for Cosmic Ray Research, University of Tokyo)

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