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Kartalska field telescope - project proposal for ground based gamma astronomy

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Abstract content

The detection of cosmic gamma quanta is very important towards to build an appropriate picture of the Universe. One of the most convenient techniques is the atmospheric Cherenkov technique i.e. the detection of the Cherenkov light in extensive air shower. The Cherenkov telescope Kartalska field for ground based gamma astronomy is presented. The Cherenkov telescope represents set of spherical mirrors working in a coincidence regime. The Kartalska field telescope is a time and angle integrating device. The set is hexagonal with one central mirror and it is similar to HOTOVO wide angle telescope. The main receiver is a spherical mirror with focal length of 1m and matrix of 5 photomultipliers. The main difference is the integrating angle of Kartalska field telescope which is smaller and not exceeds 5 degrees. The selection and reconstruction procedures as several telescope characteristics of the telescope are presented. The prototype of single detector is described. The scientific potential of device is 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. 3 (OG part 2), pages 1289-1292

Primary author(s) : Dr. MISHEV, alexander (Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences)

Co-author(s) : Prof. STAMENOV, Jordan (1Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences Sofia, Bulgaria); ANGELOV, Ivo (SWU "Neofit Rilski" Blagoevgrad Bulgaria)

Presenter(s) : Dr. MISHEV, alexander (Institute for Nuclear Research and Nuclear Energy, Bulgarian Academy of Sciences)

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