30th International Cosmic Ray Conference



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Gamma-ray albedo of the moon

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Abstract content

We calculate the production of gamma rays by cosmic ray interactions with the lunar surface. We show that the major contribution comes from neutral pions produced in proton interactions with the nuclei in the lunar surface while the electron bremsstrahlung is a minor component contributing mostly at low energies. Our calculations show a good agreement with the EGRET observations of the lunar albedo. We are extending our predicted spectrum up to 300 GeV to cover the energy range accessible by the GLAST.

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. 2 (OG part 1), pages 759-762

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