30th International Cosmic Ray Conference



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Modeling of the heliospheric structure and cosmic rays inside

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Abstract content

The heliospheric interface is calculated using a three-fluid hydrodynamic model. Using this approach the effects of different solar wind profiles, as they may occur during different levels of solar activity, on the heliospheric structure and the distribution of hydrogen and pickup ions are calculated self-consistently. We present a time dependent parameter study with respect to the solar wind density, velocity, and temperature varying over a solar cycle and its influence onto the heliospheric structure and the distribution of anomalous and galactic cosmic rays.

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. 1 (SH), pages 425-428

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