30th International Cosmic Ray Conference



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Parallel and Perpendicular Transport of Charged Particles in the Solar System

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Abstract content

A key problem of cosmic ray astrophysics is the explanation of measured parallel and perpendicular mean free paths in the heliosphere. Previous approaches used quasilinear theory in combination with simple turbulence models to reproduce heliospheric observations. Because of recent progress in transport and turbulence theory linear and nonlinear diffusion coefficients within an improved dynamical turbulence model are presented to demonstrate that the observed mean free paths can indeed be reproduced theoretically.

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 409-412

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