

SPACE AND COSMIC RAY PHYSICS SEMINAR

University of Maryland
Computer & Space Sciences Building, Rm 2400
4:30 PM Monday, February 23, 2004
Tea & cookies 4:00-4:30 PM

David Lario

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Laurel, Maryland

Energetic Particle Response to CMEs at Low and High Heliographic Latitudes

I will discuss the effects that the passage of interplanetary coronal mass ejections (CME) produces on the low-energy (77 keV-20 MeV) ion and near-relativistic (38-315 keV) electron intensities observed by spacecraft at low and high heliographic latitudes. Whereas observations at the heliocentric distance of 1 AU and in the ecliptic plane usually show low-energy ion intensity depressions associated with the passage of the CMEs, observations at high heliographic latitudes and under high-speed solar wind conditions show increases in the low-energy ion intensities. I will discuss the mechanisms that lead to this disparate behavior and their implications to infer the magnetic topology of the CMEs and the particle transport conditions within and around the CMEs.

Sponsored by: Department of Physics, University of Maryland, and the Institute for Physical Science and Technology, University of Maryland. For information call Matthew Hill at (301) 405-6209 or go to the following website: http://space.umd.edu/seminars/Spring_2004_Seminar.html (A PDF file of this abstract is available for download at this URL.)

For free parking please park in lot DD or anywhere on levels 1-2 in lot B (the big parking garage) after 4.00 pm. Make sure that you park in a spot WITHOUT a parking meter.