

SPACE AND COSMIC RAY PHYSICS SEMINAR

*University of Maryland
Computer & Space Sciences Building, Room 2400
4:30 PM Monday, February 14, 2005
Coffee, Tea & cookies 4:00-4:30 PM*

Frank C. Jones

Gravitational Astrophysics Laboratory
NASA/Goddard Space Flight Center

Simulated 2D vs. 3D Shock Waves: Implications for Particle Acceleration

We have given a rigorous derivation of a theorem showing that charged particles in an arbitrary electromagnetic field with at least one ignorable spatial coordinate remain forever tied to a given magnetic-field line. Such a situation contrasts the significant motions normal to the magnetic field that are expected in most real three-dimensional systems. While the significance of the theorem was not widely appreciated until recently, it has important consequences for a number of problems and is of particular relevance for the acceleration of cosmic rays by shocks.

<http://space.umd.edu/seminars>

Sponsored by: Department of Physics and the Institute for Physical Science and Technology, University of Maryland. For information call Matthew Hill at (301) 405-6237 or go to the website given above. (A PDF file of this announcement is available for download and posting it at your institution is encouraged and appreciated.)

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. More parking information is at the website.