Notre Dame Science
Department of Physics

RECENT RESULTS FROM PROJECT GRAND

Astrophysics Seminar

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12:30 P.M. NSH 184

Project GRAND is an array of 64 proportional wire chamber stations which detects secondary muons produced by cosmic rays. Each station is comprised of 4 pairs of orthogonal detection chambers each with an active area of 1.29 square meters. GRAND has a secondary muon counting rate of roughly 1800 muons per second with a mean angular resolution of 0.5 degrees. This data rate and angular resolution make GRAND a useful tool for probing cosmic rays from primaries with energies around 50GeV. In this talk a summary is presented of recent studies including solar phenomena, diurnal variations, and large scale cosmic ray anisotropies from four talks given by Tom Catanach and myself at the International Cosmic Ray Conference held in Beijing, China this summer. Updates and improvements to GRAND's functioning will also be highlighted.

All interested persons are cordially invited to attend.