



SACRAMENTO STATE

Department of Physics & Astronomy Fall 2008

Physics Colloquium Series

Neutrino Physics: Becoming More Real?

Over the last 70 years or so neutrino particles have progressed from “gimmick particle” to “mostly understood diagnostic tool” status. The process was slow at first but in the last ten years an enormous amount of progress has been made. Lawrence Livermore National Laboratory (LLNL) has been and continues to be actively involved in both pure and applied neutrino physics research. Today, on the pure physics side, we are collaborators on a neutrino oscillation experiment called Double Chooz, which attempts to measure how neutrinos change form (oscillate) as they travel along. In applied physics LLNL and Sandia National Laboratory (SNL) have been investigating the possibility of using antineutrinos to monitor the plutonium content of a functioning nuclear reactor core. I will present some of the recent highlights in neutrino physics research, including our recent results on nuclear core monitoring with antineutrinos.

Steven Dazeley

Lawrence Livermore National Lab

Thursday, October 9, 2008

***4:00-5:20 PM - MND 1015**

***Note new times this semester**

Open & Free to all Students, Faculty & Public