

LABORATORI NAZIONALI DEL GRAN SASSO

SEMINAR ANNOUNCEMENT

On June 30, 2008, at 2:30 pm, **Naoko Kurahashi** from **Stanford University** will give a seminar entitled:

"Ultra High Energy Cosmic Ray Neutrino Detection with SAUND"

Abstract

(SAUND) phase II uses 1000km² of ocean as a neutrino detector. SAUND aims to detect cosmic ray neutrinos of GZK energies and beyond acoustically by utilizing the ocean water and an underwater hydrophone array. A DAQ system was developed and deployed in 2005. It has been running consistently since 2006, collecting ~1 TB of data. As acoustic detection has a background different from traditional particle detectors, a study of the ambient noise was performed and concluded in 2007, giving us a better understanding of how to proceed with data analysis. An effort to isolate the neutrino signal is under way with new data processing algorithms being developed to optimize the detector efficiency.

(“B. Pontecorvo” room)