LABORATORI NAZIONALI DEL GRAN SASSO

SEMINAR ANNOUNCEMENT

Giovanni De Lellis INFN Napoli

New results of the OPERA experiment

The OPERA experiment is designed to unambiguously prove neutrino oscillations in the $\nu_{\mu} \rightarrow \nu_{\tau}$ channel in appearance mode. It has been taking data for five years, from 2008 to 2012, with the CNGS neutrino beam. Muon neutrinos are produced at CERN and delivered 730 km away at the underground INFN Gran Sasso Laboratory where the OPERA detector is located. The micrometric accuracy of nuclear emulsions, instrumenting the 1.2 kton target region of this detector, is exploited to detect the short living tau lepton through the direct observation of both the production and decay vertex. A larger data sample has been analysed and new results on the oscillations will be disclosed in this seminar.

MARCH 25, 2014 – 2:30 PM LNGS - "E. FERMI" ROOM

This seminar will be available for streaming at: http://streaming.lngs.infn.it/