



SPEAKER: Giovanni De Lellis (University "Federico II" and INFN, Naples, Italy)

TITLE: **New results of the OPERA experiment**

DATE: Tue 11/06/2013 11:00

PLACE: Main Auditorium

ABSTRACT

The OPERA experiment was designed to prove unambiguously muon to tau neutrino oscillations in appearance mode through the direct observation of tau neutrinos in a muon neutrino beam produced at CERN.

OPERA uses a hybrid structure, being made of electronic detectors and nuclear emulsions. Nuclear emulsions are used as sub-micrometric trackers capable of seeing both the production and decay vertices of the short lived (10^{-13} s) tau leptons. The experiment has been taking data for five years, since 2008. The analysis of the data is in progress.

In this seminar we report the latest oscillation results of the experiment.