

Name = Jacques

Surname = MARTEAU

Title: The OPERA experiment: a direct search of the  $\nu_{\mu} \rightarrow \nu_{\tau}$  oscillations

Abstract (less than 10 lines):

The OPERA experiment is designed to detect and identify the products of the  $\nu_{\mu} \rightarrow \nu_{\tau}$  oscillations from the CNGS  $\nu_{\mu}$  beam.

The detector is installed in the underground laboratory of Gran Sasso (LNGS), 730km from the neutrino source at CERN. Detector's target consists of lead-emulsions bricks walls followed by scintillator tracker planes to trigger and locate the events and it is complemented by two muon spectrometers.

The physics run in 2008 led to a collection of 1700 neutrino interactions in the target with 0.7 tau neutrino expected, for  $\sim 1.8 \times 10^{19}$  pot. The total statistics is expected to be  $\sim 3$  times larger at the end of 2009 run.

A brief survey of the whole CNGS project focusing on the OPERA experiment will be given in this talk, followed by a presentation of the main results obtained during the first neutrino runs.