

## OPERA experimental results

*Saturday 25 June 2011 09:50 (50 minutes)*

The OPERA long-baseline oscillation experiment is located in the underground Gran Sasso laboratory in Italy. OPERA has been designed to observe  $\nu\text{-}\mu \rightarrow \nu\text{-}\tau$  appearance in the CNGS  $\nu\text{-}\mu$  beam, 730 km away from its source at CERN. The apparatus consists of a large set of emulsion-lead targets combined with electronic detectors.

The target consists of 150,000 Emulsion Cloud Chambers (ECC) bricks, which are stacks of interleaved emulsion films and lead plates. The  $\nu\tau$  charged current interactions will be detected by identifying the decay topology of the  $\tau$  in the ECC bricks.

The first run started in 2008. The experiment is currently in the phase of data taking and analysis.

The talk, after a short description of the OPERA setup, will present an updated status report on data reconstruction and analysis applied to present samples of neutrino events.

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