

OPERA Electronic Detectors

OPERA is an hybrid detector for the tau-neutrino appearance search in a direct way, and the Electronic Detectors (ED) have the crucial role of triggering for the neutrino events, localizing such an interaction inside the target and providing complementary kinematical information to the events.

Other important task of the ED is to identify the muon since only a correct matching of such a track with a track in the emulsion connected to the vertex of the event allows to reduce the charm background to the desired level.

The ED, fully working since 2006, consist of a target tracker (scintillator strips) and a spectrometer (RPC and drift tubes). The different sub-detectors are described in the poster, as well as their performance and the physics results for the 2006-2009 data collection.

Author: Dr PESSARD, Henri (LAPP-IN2P3-CNRS)

Presenter: Dr PESSARD, Henri (LAPP-IN2P3-CNRS)