



Poster session 1 - Monday 4 July

P1.035 Search for muon neutrino disappearance at the OPERA experiment in the CNGS beam

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The OPERA experiment in the CNGS beam has finished its data taking run which lasted for 5 years in the period from year 2008 to 2012, accumulating $1.8 \cdot 10^{20}$ protons on target at the CNGS facility. Having achieved its primary goal - the discovery of appearance of tau neutrino in the $\nu\mu \rightarrow \nu\tau$ oscillation channel, OPERA has a potential for additional fruitful analyses. Here, we will present a search for muon neutrino disappearance in the CNGS beam using OPERA detector. We are using the observed neutral current interactions for the neutrino flux normalization, and charged current interactions in the search for the muon neutrino disappearance signal in OPERA. The signal is then interpreted both in terms of the standard three-generation neutrino oscillation model and in terms of selected sterile neutrino models.