

**XVI Neutrino Telescopes Workshop
Palazzo Franchetti - Venice, 2-6 March 2015**

Poster Session - Submission of Abstract

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Title of the Poster: Searches for short baseline neutrino oscillations with the T2K off-axis near detector

Abstract Text: (no longer than 800 characters)

The completeness of the three-neutrino mixing paradigm was challenged in the last 15 years. Indications of short baseline oscillations have been reported by several experiments. These may be explained by introducing one or more neutrinos that do not interact via the electroweak force: sterile neutrinos.

The T2K off-axis near detector (ND280), thanks to its location at 280m from the proton target, can contribute to the searches for short baseline neutrino oscillations. The T2K collaboration has recently published a first search for ν_e disappearance at ND280: at 95% CL this results exclude the region $\sin^2 2\theta > 0.2$ and $\Delta m^2 > 8\text{eV}^2$. A new analysis looking for muon neutrino disappearance at ND280 is currently under development. The sensitivity study performed so far indicate that this analysis will have interesting results in 2015.

Summary: (no longer than 400 characters. Insert a tag, key word, topic, etc.)

Neutrino oscillations, off-axis near detector , ND280, T2K, short baseline, sterile neutrinos, data analysis

Kindly follow the instructions above and send the abstract in a .pdf file to the local organizing committee e-mail address by January 30th.

Response will be sent to the submitter's e-mail address indicated above, by February 10th.

Posters will be exhibited all week long at the workshop site. Discussion will take place on Thursday 5th, during the Poster Party. At least one author must be available for "question-answer" time.

Best 3 posters will be awarded on Friday 6th, during the closing plenary session of the workshop.