

Spokesperson report
OPERA Collaboration Meeting
21-22 March 2017

Giovanni De Lellis

Open presentation on April 3rd at LNGS

- “The SC expects a final report from the collaboration by Spring 2017. This report should include a summary of the project and the major scientific and technical accomplishments. A list of all publications from the project should also be included.”

Main ingredients of the presentation

- Sterile neutrino search in the muon to electron channel
- New analysis of muon to tau oscillation with the looser selection:
 - new strategy and signal/background evaluation
 - five new candidates
 - BDT analysis and new significance
 - Δm^2 and $\sigma_{\nu\tau}$
- Muon disappearance with electronic detectors
- Multiplicity at primary neutrino vertices
- Cosmic-ray annual modulation

What OPERA can do in the near future

- Sterile neutrino search in the muon to tau neutrino channel
- Combine electron and tau appearance with muon disappearance in a comprehensive paper
- Study of non-standard interactions
- ...

Report of the SPSC meeting, June 2016

- The Committee **is pleased** with the steady progress achieved by the OPERA Collaboration in their neutrino oscillation analyses and their cosmic ray studies.
- The SPSC **looks forward to** the final results from the OPERA data where all the information provided by the three neutrino flavours is merged / which includes all findings on the three neutrino flavours.

Goal in the next 3 months!

Data preservation and open data

- Encouragement from the Scientific Committees: “The SPSC **recognises** the high scientific value of the OPERA neutrino samples and **notes with pleasure** the steps taken by Collaboration and CERN towards a long-term storage of the OPERA data and analysis tools.”
- Encouragement by the CERN management

Data preservation and open data

- Data Preservation
 - Agreed with CERN that data will be transferred from the Lyon computing centre (see Cristiano's presentation)
 - Make sure all the data from Scanning Laboratories are promptly copied to Lyon (significant progress on this item, see Cristiano's)
- Open data
 - Agreed to disclose the sub-sample of data used for the multiplicity analysis (nuclear evaporation tracks included)
 - Meeting at CERN next week to discuss practical things for the implementation
 - Next week Sergey will meet experts for event displays

Next meetings

- Regular Analysis meetings organized ~ monthly
- Committees:
 - LNGSC, final report on April 3rd 2017
 - SPSC, final report on June 20th– 21st 2017