

PTOLEMY

Telecon to be held on 13 of June 2018 at 16:00 Rome Time Zone

Agenda:

Discussion on possible new study of the PTOLEMY sensitivity to sterile neutrino following from recent MiniBoone results.

A.O.B

Minutes:

Alfredo, Chris and Marcello reported about the latest MiniBooNE results where a strong evidence of a ν_e excess was found. If not due to an overlooked background category this might be evidence of new physics possibly explained with a sterile neutrino and a fourth mass eigenvalue of ~ 0.2 eV.

Everybody agreed that, as suggested by GP Mangano and S Gariazzo, it makes definitively sense to study the PTOLEMY sensitivity to this physics channel.

GL Cavoto pointed out that even at a preliminary level a MC study to better address the topic of the PTOLEMY sensitivity is necessary and this will also allow to input into the paper more experimental aspects.

Then we took the opportunity to present the proposal of the Physics WP to collect in a paper all the sensitivities studies, prepared for the Lol, and the one mentioned above to summarize the physics reach of the PTOLEMY project.

There was a common consensus on a general paper signed by the whole collaboration.

Chris asked for a formal written statement of the director of the laboratory on the fact that PTOLEMY is a recognized experiment. Marcello will try to get something from the director.

The possibility of a new face to face meeting was discussed and it was decided to have such collaboration general meeting as soon as the first part of the equipment will arrive at LNGS

J Carabe mentioned that the experimental activities in Madrid started and in a week or so we might have the first report on the status of the measurements.

Alfredo briefly mentioned about developments on the ExB filter; results on how to focus the particle after the filter looks promising but more studies are needed.

