Status and introduction

A.Meregaglia (LP2I Bordeaux)

DUNE FRANCE Analysis - Zoom - 26/6/24

Advancements from latest meeting

CRP Geometry and digitization

- The geometry given by Dominique is being included in the code by Viktor. \checkmark
- The digitization has not advanced so far. X
 - COMSOL map by Yohan. Any news?
 - Discussion on Slack with Haiwang with no answer...
 - New thread by email with Dom and Brett Viren with no much more success for now...

Muon traks reconstruction

- Issues on the pandora reconstruction of tracks (splitting) shown by ? Matteo. Any news?
- Issue in coldbox tracks shown by Leila with negative ranges. Any news?

Advancements from latest meeting

Hit reconstruction and SummedADC

- After the modification in LArReco we have a memory leak.
- No improvements so far. 🗡
 - Dom has no time and did not find any solution (although he confirmed the issue)
 - Thread with Erica and Kyle. The only reply so far was to test with valgrind...

Work ongoing, unfortunately not many improvements so far.

Other (solved or critical) points not mentioned here???

Urgent topics

- Finalize the geometry and digitization in the CRP gaps and evaluate the impact on physics in particular on EM showers.
- Solve the ADC issue and understand the possible impact on calorimetry.
- Dig into pandora to improve the track reconstructions starting with muons. Large effort needed to have a final track by track reconstruction of the event instead of energy blobs.

A lot of work to be done and not large manpower. Anyone interested in any topics is welcome!

List probably not exhaustive... any other idea?