

LArSoft minutes, 7-Dec-2011. -- Eric Church

LArSoft minutes appear at <https://cdcvs.fnal.gov/redmine/projects/activity/larsoftsvn>. (The location presumably at which you found these!) For further details of matters reported here drill down into the wiki, etc, at that redmine site. Everyone is welcome to attend the bi-weekly meetings. Next meeting will be 21-Dec-2011. We'll hear from Christina Brasco at least about CRY, the cosmic ray generator. It will be back in the Racetrack, 7X0.

There are pdfs from Herb, Andrzej and from Eric (whose slides we didn't get to, and perhaps we didn't miss much) on the Documents link on redmine today.

Herb reminded us that currently the uBooNE SimWire and CalWire code are out of sync. Meaning, disastrously, that for the last few wks we convolute signals with one response and deconvolute with another. Slides 6 and 7 show the problem. Eric added that these resulting deconvoluted signals lead to phantom triples of hits. It's truly a terrible situation. In order to mitigate this Herb proposes a new service, SignalShapingServiceMicroBooNE that is to be called from both SimWire and CalWire, thus removing the need to store root data files in the repository, etc. Herb also dwelt on the need for a low pass filter with a width that cuts off before the first zero in frequency space. The current version seems too strict. He's tinkering and will check in soon. See his presentation for details.

Andrzej showed details of his shower finding. He's been mostly wrestling with the above mentioned fragile electronics simulation and some disturbances in LArSoft over past 4 wks. But even with the phantom hits in uBooNe, he gets nice angular resolutions and dE/dx separation between photons and electrons. Everything is pretty reliant on pinpointing the vertex from which the shower emanates, and single shower hit clustering. Multiple showers mess things up for now. See his slides and stay tuned for updates.

Details for the next meeting:

>>> video: 85LARSW

>>> phone: 510 423 9220 (ID 85LARSW)

>>> fnal location: Racetrack, 7th floor x-over