

LArSoft minutes, 11-Nov-2010. -- 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. Er, usually it's bi-weekly. Next meeting cuz of Thanksgiving will be in 3 weeks. Next meeting is Th, 12/2/2010, 9am CST. After that we'll meet 12/16 and then we'll adjourn for 2010.

There are pdfs on the documents link of the redmine site for today's presentations by Josh and Kinga. We give the overviews of their presentations after the following run-down of what-all LArSoft people are doing. But first some operational minutiae:

- Note that next meeting is 1 week after Thanksgiving, \*3\* wks from today. That is also a uBooNE meeting week.

General summary from this week: we are now very nearly at the point where we were when we undertook this port. Research can almost recommence.

Now for individual cursory updates, then onto Josh's and Kinga's reports:

- Brian Rebel has ported the FMWK EventDisplayBase to ART's framework code. Next is the LArSoft EventDisplay port itself. Brian estimates a couple days work on that. Watch this space for details on progress.
- Mitch is working on TrackFinder. Eric got Maddolena's code to mostly compile in ART, but changes are necessary under the hood. Brian, Eric and Mitch will discuss required RecoBase changes necessary under ART, and Mitch will effect those changes. No one upstream of the Prong classes (Tracks, Showers) should notice or care. Mitch will then work on a Calorimetry package. Eric can then work on his AggregateEvent module, on which he'll report a proposed structure at the next meeting.
- Adam stuck in and then pulled out lotsa new uBooNE gdml, cuz it broke MC running. When he returns from his GRE exam this wkend he'll work on fixing all the new uBooNE geometry. Good luck on the exam, Adam!
- Brian Rebel's package in ART to run through the ArgoNeuT data has been exercised at some level by Mitch. It appears to work. Josh has a script to run on the full dataset and stands at the ready to push the button to do that. Perhaps Mitch will weigh in on the progress of that effort next meeting. \*\* This item left over from last meeting, cuz I don't know where it stands \*\*
- Ben Morgan gave a short update on installing ART on external sites, Imperial College for example. He's working on a script to mimic FNAL CD's so-called relocatable UPS builds. We remind that Ben is jumping through hoops that are unnecessary to external collaborators who're playing by the strict rules of working on external machines running 32 or 64 bit SLF4 or 5. Ben's building on Open SUSE 64bit linux. We are keen to hear back how it goes at the next meeting. We also are eager to hear Bill Seligman's external ART install progress at Nevis. Bill is in fact playing by the above mentioned strict rules. One hopes the advertised FNAL CD support pays some dividends for Bill and those slightly less ambitious than Ben.

Josh reports wonderful progress on HoughLineFinder. It is now ported to ART. Bugs are fixed after a couple wks of work. Analysis and vetting by way of his new HoughLineFinderAna module shows perfect agreement for ART/FMWK. Woo-hoo! If we're willing to spend 5 sec/evt we'll currently get few mm between hit and Hough line. See his plots in the pdf on the wiki.

Josh also reported on ArgoNeuT-specific handscan ports for modules MergeScan, ScanInfo and ScanFilter. All these things will have applicability on, e.g., uBooNE, but only after some generalization. Currently these modules put out info onto the event in ART. Again, see his pdf for details.

Kinga similarly shows great progress on DBScan and T962-MergeData. Both are ported to ART. DBScanAna demonstrates almost perfect FMWK/ART agreement for MC muons. When she looks at real ArgoNeuT data she has total agreement for 19 events. In the 20th event she sees 77 (75) hits for ART (FMWK). The source of the disagreement appears to be upstream of DBScan. Kinga is sanguine about this, but may spend another day drilling down into this disagreement.

Details for the next meeting:

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>>> phone: 510 883 7860 (ID 85LARSW)  
>>> fnal location: LIBRA - WH9SE
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