

LArSoft minutes, 14-Oct-2010. -- Eric Church

LArSoft minutes appear on the new <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. We remind all that everyone is welcome to attend the bi-weekly meetings. Next meeting is 10/28/2010.

This is the first meeting since the blow-out, gala ART workshop of last week. Kinga reports it's gone smoothly to port the new, elegantly named T962_MergeData package -- an ArgoNeuT specific bunch of code. She's also well on her way to porting DBSCANFinder module. That will finish out the ClusterFinder package, except for LineFinder, which is used by Track3DFinder. Eric ported ClusterFinder/HoughLineFinder and ClusterFinder/ClusterFinder, breaking them into the appropriate Ana modules for diagnostics. Of course, now it remains to run jobs which exercise these things and to check FMWK-ART consistency. But, many important hurdles and techniques were employed which hopefully translate to other ART port efforts.

Roxanne is working on the ShowerFinder pkg, though she needs a lot of stuff upstream to really make it run.

Josh is mid-way through porting the VertexFinder pkg. He urges us to please make appropriate efforts on EventDisplay in ART. Point taken.

Brian Rebel has almost finished the binary data package in ART we need to run through the ArgoNeuT data. Josh has that script ready to run and stands at the ready to let 'em rip. We're reminded that Brian R also has apparently ported FFTHitFinder, though memories are fuzzy.

Looks generally like we'll be ready to run jobs in ART in 2-ish wks all the way through Vertexing.

Bill Seligman has hit a wall trying to get the alleged Relocatable UPSes set up at Columbia. The setup_larsoft_.sh bash script dies early. This, despite running on a 64bit SLF5 machine, one of the handfuls of configs exactly supported by CD. It's bewildering. We look forward to his dogged pursuit and report of this problem in 2 wks. Other remote sites stand to benefit from Bill's work.

Adam showed wonderful progress on uBooNE gdml. He's got a little problem trying to work on uboonegpvm01 which Eric will follow up with. He can work happily on flxi09 without trouble, since he's pretty decoupled, as yet, from the frameworks, lower case f. Running MC jobs to test the geometry is a bit down the road, as yet. But, not by much, looks like. PMTs appear to be on the East, not West side of the detector. He'll fix that. On-detector electronics and on-support-frame electronics are to be added, though all urge that these low mass items take a back seat to Adam's 0th order priorities. Adam will talk to Kinga about cryostat endcaps. Also he needs cryostat support legs. But the frame is in, the Cathode, the wires. It looks great. Adam's biggest work is in hand-decoding Bo's CAD files with some bootleg lame-o CAD approximation software. Adam's gone to great lengths to get this short-term CAD solution working in VMWare on his Mac. Josh suggests that there's a Windows box at Yale of which Adam could avail himself. He'll pursue this.

Eric showed his CalData FMWK-ART consistency plots (pdf under Documents on the above redmine site). All looks great, once parameters in the two jobs were aligned. Note that the Induction pulse is pedestal subtracted and thus the bipolar nature made unipolar in going from

RawDigits to Wire objects. This explains why the relative $(\text{RawData}-\text{CalData})/\text{RawData}$ comparisons sit nicely around 0 for Collection, but around 0.5-0.6 for Induction wires -- even though the comparisons are only made in the meat of the pulses. (i.e., the clipped Induction signal makes for a 100% difference in fully half of the Induction pulse.)

Please keep up the good work on the ports. Hit Eric and Brian with your questions.

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