LArSoft minutes, 26-Jan-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. We go to a new schedule starting now. Next meeting will be 2/9/2011. It will be in 7th floor x-over. This is our new home, every other Wednesday.

There are pdfs on the documents link of the redmine site for today's presentations by Adam. Click Documents, sort by Date.

New ART, and all externals, has been rolled out. NoVA has cut over to this new install. LArSoft will cut over to it next week. LArsofters: Watch for an email about 31-January. You will be asked to check in all your outstanding code, and then sit tight. The all clear will come within 24 or 48 hours. You will then be exposed to a modern era G4, GENIE, ROOT, etc, and python scripting for jobs will become fhicl. That'll probably be the biggest impact, a new job scripting language. There will be a link on the redmine site for how to use that new scripting language. Brian assures it's pretty nice.

Adam reported on LArSoft geometry work. He's still got this weirdo problem of GENIE jobs crashing for uBooNE geometry when even the subtlest of PMT cylinders are included. Without PMTs, all's well. It looks like a pernicious memory overwrite from some unrelated place, or a geometry nesting/array dimensioning issue. Eric/Brian/Adam will dive in with gdb and drill down in the next couple weeks. Anyone else with ideas is welcome to join this decidedly unsexy, but high-reward! effort. (Hearty claps on back sure to be doled out to the person who solves this). He's also got a LAr1 and an LBNE geometry to discuss. LBNE and LAr1 geometries conform to the required nesting rules and so jobs now run. Yay, Adam. The rock around LBNE is now 2.84 g/cc, instead of the shotcrete value of 1.8, or whatever, which was just wrong. We presume the same molecular content in DUSEL rock as shotcrete and other forms of concrete in use everywhere in other geometries. LBNE is currently a cryostat of LAr surrounded on 5 sides. Adam will extend the walls of the LBNE detector hall up a few meters and add the 6th side of rock (on top) too. Adam is also going to start running CRY jobs for the new uBooNE geometry, with an eye toward becoming the MC batch job guru. Woo-hoo.

Kinga has ported all laggard geometry features of ArgoNeuT into ART. Yay, Kinga.

We revisited again Brian's new proposed RecoBase architecture plan. Many concerns were expressed about the potential for this to hold up physics progress and in particular tying up the valuable -- indispensable! -- ArgoNeuT help. Many people have theses to write on short timescales. These are key LArSoft coders. We can not set them back. Brian assures this can be done adiabatically. Meaning slowly, in a non-disruptive fashion, and no heat exchanged. Insert your joke here. Kinga has been identified as someone to change modules to services at the Cluster level, in any case. Brian can make changes to the RecoBase data classes. This latter bit can be entirely non-disruptive. We'll check in in two weeks and gauge progress to see if Kinga's efforts should be continued, and if she can afford the anticipated time required.

Josh asked about Condor with LArSoft. It's up. Georgia exercises the local worker nodes frequently for uBooNE. We urge you to start at https://cdcvs.fnal.gov/redmine/projects/larsoftsvn/wiki/Batch_job_submission.

Details for the next meeting:

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>>> video: 85LARSW
>>> phone: 510 883 7860 (ID 85LARSW)
>>> fnal location: ___, 7th floor x-over
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