LArSoft minutes, 16-Sep-2010. -- Eric Church

LArSoft minutes appear in the uBooNE docDB. For the details of these matters we advise drilling down into the usual spot at https://cdcvs.fnal.gov/redmine/projects/activity/larsoft (check also the Wiki button there) and attending the bi-weekly meetings. We welcome all interested parties and would-be contributers. Next meeting is 9/30/2010, 9am CDT.

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Nice turn-out today, perhaps reflecting a keen interest in getting involved as the ART port proceeds.

(1) Brian and Eric report progress on the ART port. We've made good headway. MC jobs have been successfully run. We're 2 modules into the Recon process. Kinga's up next, then Josh, then Maddolena/Ornella and Biagio. Today/tomorrow Brian is swapping out Scons for SRT. Hence, Early Adopters and newcomers have one less thing to learn, namely the build system SRT will be familiar. And more important, the public/private release and development paradigm will be familiar, something Scons doesn't trivially offer us.
(2) Saima reported that she's not seeing any hyperons in the Genie 2.6.0 MC evts even after ~1500 evts, by which point all expect there oughta be some. She's gonna ping Costas and perhaps the Genie chat rooms and billboards and wherever else those people congregate.
(3) Josh reports a lot of nice progress on the (yes, ArgoNeuT-specific) event display in FMWK. He was urged by all to try to abstract the code to work with subsequent LAr targets by taking parameters, where available, from geometry objects. He made a 'meh' kind of sound in response. In any case he's made tools to allow for handscanners to walk through evts and determine if they're upstream-of-detector or exiting, non-contained muons or both. Zoom no longer persists from evt to next evt. TBoxes no longer behave bizarrely.

This is a good place to note that the event display in ART is about a week away. Other things that are a week away (and which really only concern the Early Adopters, you know who you are) which will making the bleeding edge slightly more hospitable are the appearance of a modern era ROOT release and the welcome change of the executable named mute to something more palatable and a renaming of the event exception package. Also, the ability to upcast (see point 5 below) is imminent.

(4) Maddolena/Ornella, rendered on video in large pixels from Italy, report that their Calorimetry module, coming downstream of Track3DReco and perhaps related to Biagio's ShowerFinder work, is proceeding nicely, and is soon to be checked in (and Ported, we presume! to ART). Maddolena and Biagio have some notions to abstract a lot of their common Track/Shower code out into the Prong class, maybe some stuff into Utilities. We welcome such methods, and a general broadcast when they're available.
(5) Brian P has some new Filter code he'll check in and port to ART. He's also going to dive in and restore the desired FMWK feature of attaching all the associated, drifted electrons to the SimDigit class from the RawDigit class. This will be possible when upcasting is built into ART by our CD support crew, and which is imminent. We would like a solution here that

doesn't require ArgoNeuT to have to go back and do a 2 week processing of their raw data to tack on a new RawDigit class. Is it?

(6) AggregateEvent module is making progress. Brian R and Josh and Mitch and Eric discuss other things the new class, called Event, ought to contain. As of now it's merely a collection of strong vertices and a vector of tracks to which each is associated.

(7) Leslie reports ongoing work and success in studying MC truth K/p voxel energy-deposition studies. He resolved an odd final voxel problem, on which perhaps he'll report more in a subsequent mtg.

(8) Ben Jones reports Scintillation pulse shape discrimination early work. Again, we can look fwd to a report down the road.

(9) Kinga's gonna Cowboy/girl-up and dive into ART, porting ClusterFinder and her new ArgoMinosMerge pkg, nee' MergeEvent. Here's a good example of a module for which no effort to be detector-agnostic will be made. Clearly labeled and intentioned, so fine.

(10) Adam Patch is working hard on getting the uBooNE geometry in. Dialogue with Bo Yu we hope might aid in quick progress.

(11) Georgia is going to dive into uBooNE electronics simulation in ART. A brave Early Adopter.

(12) Watch for the obligatory Code Specification document to show up on the wiki soon, reminding everyone of the tiresome refrain: make your code detector agnostic, where possible. Please. And read lotsa other LArSoft ART code to conform to the standard ways of doing things.