

LArSoft Coordination Meeting

Release and project report

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Today's agenda and speakers

- Release and project report (Erica)
- Status of multi-threaded LArSoft work (Mike Wang)
- Exploring a 2D drift simulation in LArSoft (Leon Rochester, Tracy Usher)
- AOB

Releases

- Last week
 - v08_07_01 released Feb 5
 - Updated to art v3_01_01
 - The working bug fix for “illegal instruction” errors in art
 - Corrects an incorrect attempt to fix the problem in art v3_01_00
 - v08_08_00 released Feb 8
 - Changes to avoid discarding createEngine's returned reference, per presentation at previous LCM
 - Added ability to iterate over ChannelID_t within a TPC
 - `GeometryCore::ChannelsInTPCs()` returns `std::vector<raw::ChannelID_t>`, a sorted list of unique channels in TPCs
 - Updates to shower track fits

Releases

- This week

- Decoupling classes with geometry information from the source of that information (currently GDML)
 - A new geo:GeometryBuilder class tasked with reading, interpreting the source
- Space charge service interface improvements
 - As discussed at previous LCM

- Next week

- Will work to accommodate MicroBooNE production release freeze schedule
- The plan at this point
 - Integrate changes requested by MicroBooNE into develop / weekly release + v08_00_00 production branch
 - Migrate v08_00_00 production branch to art v3.01.02
 - Cut two releases:
 - the usual weekly release
 - v08_00_00_02 for MicroBooNE

art v3.02

- Expect that *art* v3.02 is now available
 - Decouples *art* libraries from root, root-based I/O
 - Introduces a new umbrella ups product, **critic**, that will set up root + associated dependencies
 - **critic** product depends on *art* and new **art_root_io** product
 - Various breaking changes as noted [on the art breaking changes page](#)
- Earliest time estimate for LArSoft migration is end of February
 - Plan to migrate as soon as possible, **preferably after Genie v3 migration**
 - **Seeking input from experiments** on issues that might affect this schedule

Side note: the next Spack-based “minimally viable product” test will be based on LArSoft + *art* v3.02, so requires migration before it is available

Genie v3

- Test release for Genie v3: v08_01_00_01 (released Jan 7)

Need sign-off from every experiment before migrating

- As of the last LCM four weeks ago
 - MicroBooNE anticipated a decision in 1 - 2 weeks

We've received no other input, guidance as to when to expect decisions
Plans?

LArTPC data overlay workshop March 4



Overlay workshop
For the LArTPC community
March 4th 2019 WH Fermilab

join us for a day long workshop to discuss the latest in the overlaying technique: adding simulated signals on top of collected data and help design the new generation of MC samples

Organisers: Erica Snider, Afroditi Papadopoulou, Wesley Ketchum, Adi Ashkenazi

Register here: <https://indico.fnal.gov/e/lartpc-overlay-workshop-march-2019>

LArTPC data overlay workshop March 4

- Potential topics
 - Introduction to the issues of data overlays
 - Experiment presentations
 - Adding signals
 - Calibrating simulation to match data
 - Timing in the simulation and data
 - Production workflows for producing samples

Register here: <https://indico.fnal.gov/e/lartpc-overlay-workshop-march-2019>

The end