

LArSoft Coordination Meeting

Release and project report

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on behalf of
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Today's agenda and speakers

- Release and project report (Erica)
- Status of Geometry service changes for pixel readouts (Kyle Knoepfel)
- Decay distance (dk2gen) in NuMI flux (Wenqiang Gu)
- Proposed changes to enable storing lite sim::SimEnergyDeposit and discarded EM shower daughters information (Laura Domine)
- AOB

Releases

- Since July 12 LMC:
 - [v09_55_00](#) released July 14
 - New features
 - `lardataobj#27`: fix `recob::Hit` comparison operator to use peak instead of start time
 - `lardata#27`: add signal-shaping for multi-threaded operation
 - Bug fixes
 - `larsim#97`: light simulation updates for vertical drift
 - `larutils#13`: fix `sbncode` CI problem
 - [v09_55_01](#) released July 21
 - New features
 - `larpandoracontent#44`: add new neutrino vertex finding algorithm using NN approach

Releases

- Since July 12 LMC:
 - [v09_55_01_01](#) test release for GENIE v3_02_00 released July 25
 - Note:
 - Changes were needed that were not in this test release
 - New release of nulite (to be released soon) will address these
 - Can proceed with GENIE v3_02_00 testing from there
 - [v09_56_00](#) released July 28
 - New features
 - larana#19: modifies OpHit finder to save start and rise times as new attributes added in lardataobj#26

Releases

- Since July 12 LMC:
 - [v09_57_00](#) released Aug 18
 - New features
 - larreco#45: add tool interface to normalize dQ/dx for Gnocchi Calorimetry module
 - larrecodnn#29: suppress storage of wires with no ROI
 - larwirecell#24: interface changes for WireCellToolkit
 - larwirecell#25: update WireCell dependency
 - Bug fixes
 - lardataobj#28: fix misspelling in AssnsDicts selection XML file
 - [v09_58_00](#) released Aug 25
 - New features
 - lardataalg#35: make modified box recombination parameters configurable
 - larsim#97: include binomial fluctuations to Correlated method of IonizationScintillation
 - Bug fixes
 - lardataobj#29: fix bug in OpDetWaveform::operator< definition

Releases

- Since July 12 LMC:
 - [v08_05_00_18](#) released Aug 25, MicroBooNE MCC 9.1 production patch release
 - Update GENIE to v3_00_04_ub4
 - Add TextFilGen server in package larsim
 - [v09_58_01](#) released Sept 1
 - Bug fixes
 - larrecodnn#30: convert TDC to tick for true energy deposition. Now works for all detectors.
 - [v09_58_02](#) released Sept 7
 - New features
 - larpandoracontent#45: adds support for MVA features persistency, tool management
- This week
 - Approved PRs

Status of PRs

- Under discussion:
 - [larsim#95](#): Add ability to read HepEvt events from server (opened May 30)
 - Discussed at a previous LCM
 - Author currently addressing security issues (??)

Status of PRs

- Approval in progress
 - Linked changes to reduce simulation output size for ICARUS
 - [lardataobj#30](#): add sim::EnergyDepositLite and sim::MCMiniPart data products
 - [larsim#99](#)
 - Add storing of dropped MCParticles (EM shower daughters) to LegacyLArG4
 - Allow MCReco to read sim::EnergyDepositLite and sim::MCMiniPart

To be discussed here today

- [larsimdnn#7](#): add module that uses TensorFlow 2.6
 - Module for fast photon simulation + TF graph loading tool
- [larrecodnn#31](#): moved FindTensorFlow.cmake to new larfinder package

Now approved, ready to be merged

Standard code format for LArSoft

- LArSoft intends to implement a standardize code format using [clang-format](#)
 - Goal: to facilitate readability, usability of the code
- Currently have example of proposed formatting style here
 - <https://github.com/knoepfel/larreco/tree/clang-format-example>
 - Please provide any feedback to erica@fnal.gov; garren@fnal.gov; knoepfel@fnal.gov
- Plan to include this in the automatic code-checks phase of PR approvals
 - Will provide instructions for developers to use before creating PRs
 - Will also develop a procedure for those with existing code changes that are not yet merged into repositories.

Hope to roll this out in the next few weeks

Searchability of LArSoft wiki on GitHub

- Noted earlier that there were issues that prevented Google from indexing the LArSoft wiki pages when migrated to GitHub
 - Other search engines seemed to work...
- To the best of our knowledge, these issues have been resolved and all content should now be searchable

Please let us know if you have any problem finding things via Google!!

Update on possible multi-threading workshop

At instigation of experiments, working to organize a multi-threading workshop

- Driven by current experiment needs

Current status

- Have been seeking input to further refine goals, program
- Current thinking is still multi-day, addressing specific cases
 - Tutorials also possible
- But, still need additional input before we can proceed.
 - [Please provide input here](#) or send email to erica@fnal.gov, knoepfel@fnal.gov and lato@fnal.gov by the end of Sept.

The end