



LArSoft: status report

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LArSoft coordination meeting, February 27th, 2018

Today's agenda

- Release and project report (*Gianluca Petrillo*)
- Update on LArG4 refactoring (*Hans Wenzel*)
- An option for doing energy depositions into LArG4 (*Wesley Ketchum*)
- Introducing GENIE version 3 (*Marco Roda*)

LArSoft releases: last week (v06_69_00)

Last week LArSoft release was v06_69_00:

- fix to unexpected changes from last release of larpandora (needed minor changes in experiment code too)
- new feature: **simulated event weight “framework”** ported from MicroBooNE to LArSoft by Marco Del Tutto
- **bug fix** on `TrajCluster` module by Bruce Baller
- dk2nudata UPS product now contains data product classes from former dk2nu UPS product, making them accessible from *gallery*
- **breaking change** affecting `GenieGen...`

Reminder: last week breaking change involving IFDH service

With LArSoft v06_69_00 came a **breaking change** in GenieHelper:

```
%MSG-s ArtException:  GENIEGen:generator@Construction 26-Feb-2018 12:22:33
ModuleConstruction
cet::exception caught in art
---- ServiceNotFound BEGIN
  Unable to create ServiceHandle.
  Perhaps the FHiCL configuration does not specify the necessary service?
  The class of the service is noted below...
---- ServiceNotFound BEGIN
  art::ServicesManager unable to find the service of type 'ifdh_ns::IFDH
---- ServiceNotFound END
---- ServiceNotFound END
```

The resolution is documented in [LArSoft release notes](#):

⇒ add IFDH in the `services` section of your FHiCL configuration:

```
services: {
  # ...
  IFDH: {}
}
```

⇒ ... *or* append `services.IFDH: {}` at the end of the configuration file

LArSoft releases: this week

Scheduled for the release this week:

- update to **art 2.10** (in fact, 2.10.3), unless show-stoppers arise
 - new features and the (very minor) breaking changes are documented in [art wiki](#)
 - a producer module can ask *art not to write some data products into the ROOT output file*, making them effectively “temporary”
 - option `--validate-config` makes `lar` executable perform a full validation of the FHiCL configuration, then exit
 - ... and some more features
- ... plus the branches you will request to merge (as usual)
- binaries distributed for: Scientific Linux Fermi 6 and 7, OSX 10.12 (“Sierra”), Ubuntu LTS16

GENIE 2.12.10

GENIE 2.12.10 is now available:

- release notes are available in [the official GENIE site](#)
- some random highlights:
 - `EmpiricalMEC-FracPN_NC` and `EmpiricalMEC-FracPN_CC` now directly specify the PN pair fraction, instead of being multiplied by another factor
 - `NievesQE` code adjusted to have correct `max_xsec` for more than 1 nucleus in a simulation

Any objection/concern about LArSoft updating from GENIE 2.12.8 to 2.12.10?

Removing distributed binary releases older than v06_00_00

- intent to remove all release prior to LArSoft v06_00_00 from `/grid/fermiapp/products/larsoft`
- that includes production releases...
 - we guarantee that production releases *can* be reinstalled
 - we *do not* guarantee the same for the other removed releases
- if there are releases you want kept, please say so

Write [Lynn](#) if you want any specific release kept in there!

So far, only v03_08_02 (SBND) and v05_00_08_01 (MicroBooNE).

Forecast for the next hour

Now on air:

- Release and project report (*Gianluca Petrillo*)
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