

# LArSoft Coordination Meeting

*Release and project report*

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on behalf of  
the SciSoft team  
*Fermilab*

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## Today's agenda and speakers

- Release and project report (Erica)
- ParticleID data product update (Herb Greenlee)
- cetmodules 2: overview, highlights and implications for UPS to Spack migration (Chris Green)
- AOB

# Releases

- Last few weeks
  - v09\_32\_00 released on Sept 30
    - New features
      - [larsim#74](#): Light simulation updates for DUNE vertical drift
      - [larsimrad#4](#): decay0 changes
        - *Improve rejection method and make it configurable + allow TF1 decay positions + fix alpha mass bug*
      - [lardataobj#16](#): Add support for vectors of *art* pointers in reco objects
      - [larbatch#17](#): Revert to old mrb when necessary
    - Bug fixes
      - [larsim#73](#): replace coordinate subtraction with pitch to prevent negative distances
        - *Resolves [issue #26277](#)*
      - [larpandoracontent#33](#): Fix invalid iterator use in ClusterAssociation. Avoid comparisons with deleted clusters
      - [lardataalg#26](#): Fix 2-year-old bug in `detinfo::DetectorTimings::BeamGateTime()`
      - [lardata#18](#): documentation format fix in `DetectorClocksServiceStandard`

# Releases

- Last few weeks (cont'd)
  - v09\_32\_01 released on Oct 7
    - New features
      - [larrecodnn#23](#): Add FHiCL parameter to specify number of inference retries
      - [larg4#28](#): add linkage to nug4\_additionalG4Physics lib
    - v09\_33\_00 released Oct 13
      - New features
        - [larsim#75](#): removes self-supported physics list factory in favor of new g4alt factory
          - *Coupled with a linked PR in nug4*
        - [larg4#29](#): allows CI testing with new nug4 / physics list factory
      - Bug fixes
        - [larsim#71](#): cleanups to Boost tests as part of [issue #26092](#)

# Releases

- Last few weeks (cont'd)
  - v09\_34\_00 released Oct 21
    - New features
      - [lardata#19](#): add DumpParticleIDs module to vet future ParticleID updates.
      - [lardataalg#25](#): boost test cleanup + remove unused comparisons and conversions
    - Bug fixes
      - Boost test cleanups: [lardata#17](#), [larreco#34](#), [larana#12](#), [larevt#13](#), [larexamples#7](#), [larcorealg#22](#), [larcore#8](#), [larcoreobj#12](#), [lardataobj#14](#)
      - [lardataalg#27](#): documentation fix
  - v09\_35\_00 released Oct 27
    - New features
      - Linked changes: support multiple larg4 instances. Resolves [issue #26249](#).
        - [larg4#30](#), [larsim#76](#)
      - [parpandoracontent#34](#): update MC processes available internally. No output changes
    - Known issue
      - Running two larg4 instances via different fcl files works. In a single fcl file does not

# Releases

- This week
  - Approved PRs
  - Aiming to include updates to ifdh\_art and nutools that build with cetmodules instead of cetbuildtools
    - Only minor changes required. May be an update script available.
    - Moving forward, users must specify include path for the IFDH header:

```
#include "ifdh_art/IFDHService/IFDH_service.h"
```
    - Under testing now

# Status of PRs

- Under discussion:
  - [larana#14](#): Bug fix in OpHitFinder (formerly [larana#13](#))
    - Purpose
      - Fixes problem in pedestal calculation when ADC is saturated.
      - Does not change default behavior (i.e., with the bug)
    - Status: Final issues being addressed by SciSoft team as (this) new PR
  - [larcorealg#21](#): geo::OpDetGeo made aware of detector orientation  
opened Aug 21
    - Purpose
      - Fixes a problem where rotations in GDML are not taken into account by Geometry service in some cases. Needed by DUNE vertical drift and SBND.
      - Addresses [issue #26118](#)
    - Status
      - Last week, found dunefd-hd and SBND photo-detector geometry issue in CI testing
      - Placed on hold for two weeks while author is away

# Status of PRs

- Approvals in progress
  - [larcorednn#24](#):
    - Fix bugs and added new version also output clean signal waveforms
    - Needs minor follow-ups from author before being ready to merge



# Status of LArSoft wiki access

- Looking at migrating LArSoft wiki to GitHub to address problems with wik access due to Fermilab SSO requirement
  - Status
    - Have performed test migrations.
    - Still evaluating result
    - Expect to make a decision within next couple of weeks.
  
- As mentioned last time:
  - Lab plans to allow CERN SSO logins to view most content behind Fermilab SSO
    - Plan to expand this to SSO logins from other labs. Unclear if universities will be included.
  - The lab will provide “lightweight” Fermilab SSO accounts, much as CERN does
    - Will allow access to more restricted set of Fermilab SSO-protected content
  - In the meantime, <https://search.fnal.gov> site (SSO-protected) intended to provide google-quality search *within* SSO-protected domain (and only within...)

The end