LArSoft Coordination Meeting

Release and project report

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Today's agenda and speakers

- Release and project report (Erica)

- Discussion of art v3 migration (all)

- Changes to MCRecoPart (Gray Putnam)

- AOB

Releases

- **Last week**

  - V07_12_00 released on Nov 29

    - recob::Track double to float conversion

    - WireCell update

    - Lazy DB access

    - LArG4 refactoring fixes

    - Some bug fixes

    - New mrb release

      - Newly re-written gitCheckout
      - New commands zapDist (zd) and zapInstall (zi)

- **This week**

  - Weekly release

    - Persist Pandora slices as recob::Slice

    - WireCell update

  - Test release with Genie v3

Genie v3

- Had previously announced a test release of LArSoft with Genie v3 for this week.

  - Was to be based on last Thursday's (Nov 29) tag of Genie v3

  - But this plan is on hold – we do not yet have a working tag

    - Have been told they are working on this as hard as they can

    - Unsure of the timescale for when it will be ready

  - Previous target of migrating to Genie v3 next week is now in question

- The process once the test release is ready

  - Since this is a physics-level package, we require sign-off from all experiments before we migrate

  - This represents a major change in the interface to Genie / reweight code

    - There are no shortcuts here. Plan to produce test releases until we get sign-off

    - But generator and reweight issues / problems might factorize (??)

Discussion of migration to *art* v3

- Would like to migrate to *art* v3 at earliest opportunity

  - Another big, breaking change

  - Instructions for updating from art v2 to art v3
    (Linked from the breaking changes wiki page)

    - Also see the talk "Upgrading LArSoft to art v3" by Kyle at the Oct 10 LCM

- *art* v3 supports multi-threading, but performs serial by default

  - No algorithms need to change (thought the code around them might...)

  - But there may be other pitfalls

    - "Accidental" framework behavior: things that are true not by design, but due to an implementation detail that was not part of meeting a "requirement"

    - Jobs that relied on accidental behavior might now fail

- Moving LArSoft to support multi-threading is under way, but will be a long, gradual process

Discussion of migration to *art* v3

- **What is on the table now?**

  - Migrate to art v3 asap

    - Painful now, particularly with production processing campaigns under way or soon to be

    - Avoids creating multiple production release branches that are far behind the head of develop

      - To move a production branch ahead likely requires duplicating a lot of work.
      - Easiest to do before cutting releases
      - Having said this, LArSoft is committed to supporting existing ProtoDUNE production branch

    - Will require the usual process of release candidates, testing, approval

      - Not obvious we can do this before MicroBooNE needs to start production

  - If not now, then when?

- **Would like to discuss this with everyone present**

The end