# LArSoft Coordination Meeting

Release and project report

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# Today's agenda and speakers

- Release and project report (Erica)
- Survey of module and service usage across LArSoft (Kyle Knoepfel, Saba Sehrish)
- Change to geometry code affecting some drift distance calculations (Gianluca Petrillo in absentia)
- AOB



### Releases

#### Last week

- Released v08\_20\_00 on May 15
  - Updates to Pandora
  - Improvements to OpDetWaveformDumper
  - Bug fixes on develop

#### • This week

- ifdhc update (so a new nutools)
- Wire-cell toolkit update
- Fix for backwards compatibility bug in v08\_19\_01
  - Observed as problem reading in recob::Vertex created by v07 series release



# Migration to python 3

- Discussed migrating to python 3 last week
  - See the discussion in the May 7 Release and project report
  - One notable point: migrating to python 3 requires dropping SLF6

### Seeking feedback from experiments, users

- Do you support a move to python v3?
- If so, on what timescale?
- What if any support would you need from LArSoft?



### nutools re-factoring

### The problem

- nutools tightly couples several disparate products into a single ups product
  - E.g., Geant4, Genie,...
  - Version of nutools tied to specific versions of those products
  - No underlying reason for this strong coupling
- LArSoft depends strongly on nutools (i.e., to specific versions)
  - Couples LArSoft to specific versions of those underlying products

#### The solution

- Re-factor nutools into separate components
- Allows experiments (including NOvA) flexibility to select products independently of other experiments
  - Provided interfaces (which may be data products) don't change
- NOvA (the other major nutools stakeholder) agrees with this strategy



## nutools re-factoring

### The plan

- Working on developing a detailed proposal / plan this week
  - Hope to be ready by next LCM
- Current thinking: break nutools into the following:
  - Genie interface product
    - GenieHelper and related code
  - Geant4 interface product
    - G4Helper, G4PhysicsLists, etc.
  - Random number services
  - Everything else

### Seeking comments, other feedback



# The end