

LArSoft Coordination Meeting

Release and project report

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Today's agenda and speakers

- Release and project report (Erica)
- Status of Spack/SpackDev (Chris Green)
- AOB

Releases

- Last week
 - Released v08_21_00 on May 30
 - TrajCluster 3D re-write to improve CPU performance via event slicing
 - Updates for calibration of space charge effects
- This week
 - Moving to *art* v3.02.06
 - No substantive changes for LArSoft
 - nutools 3
 - See comments on next slide/Initial release with incremental changes to nutools (see wiki page under nutools)
 - No detailed plan at the moment
 - Genie v3 test release
 - Based on nutools 3

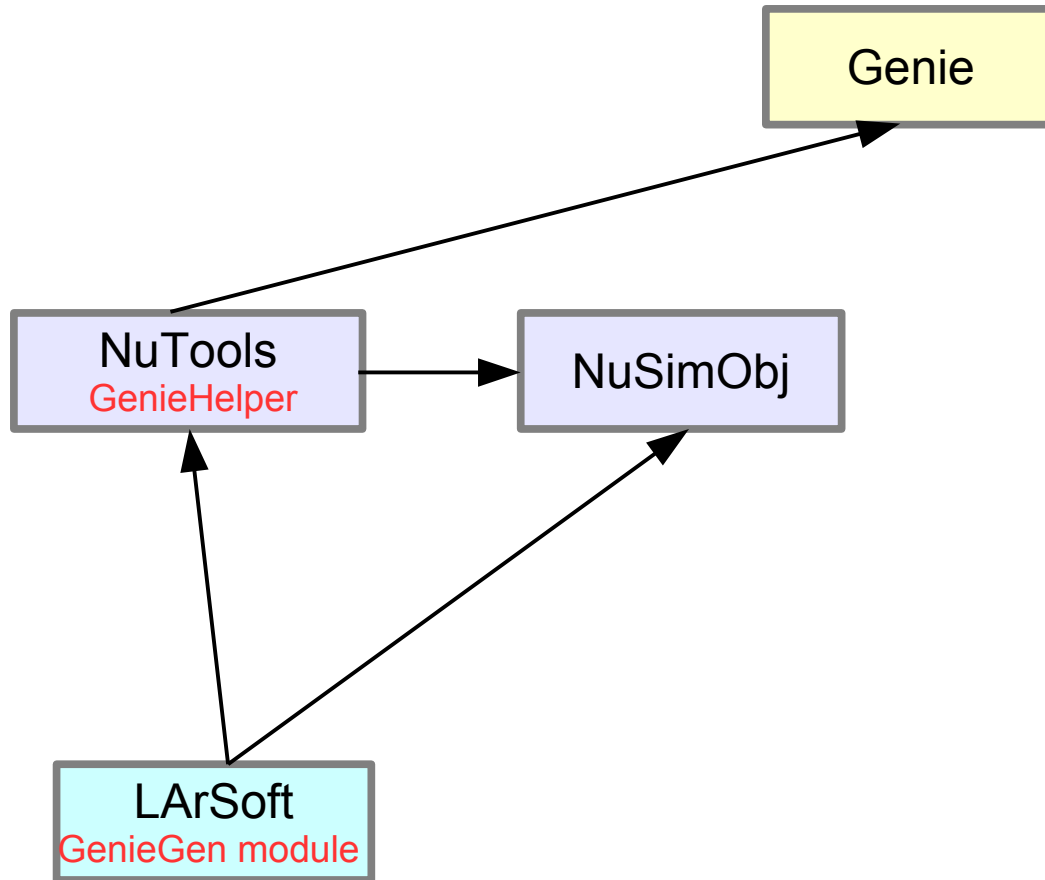
Status of nutools re-factoring

- The plan

- Re-factor nutools into separate components
 - Introduce products that allow decoupling of LArSoft from specific versions of Genie, Geant4, and other products currently connected to nutools
- nutools currently contains:

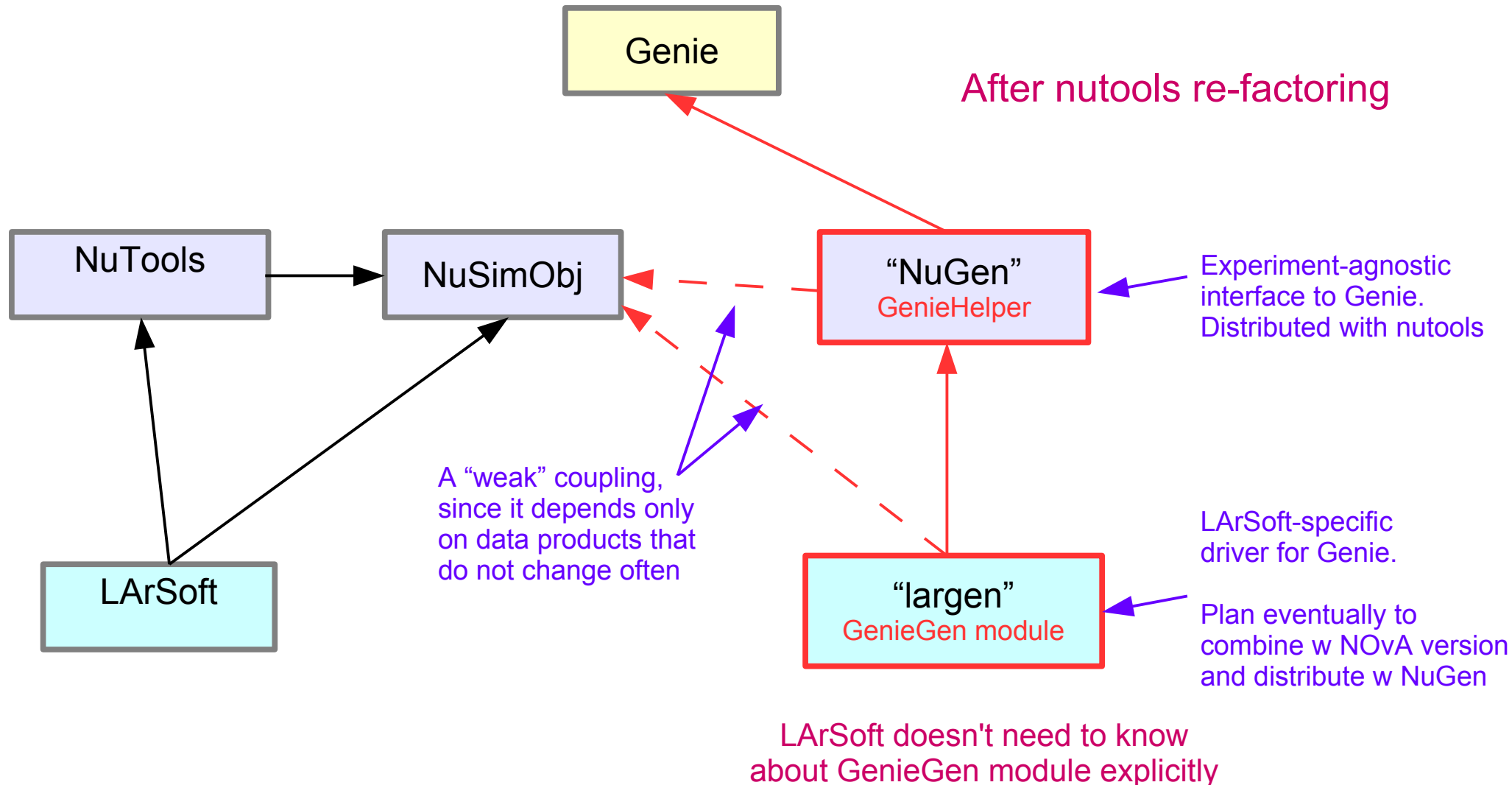
• EventDisplayBase	• IFDatabase
• EventGeneratorBase	• MagneticField
- CRY, Genie, GiBUU, GeneratedEventTimestamp_plugin	• NuBeamWeights
• G4Base	• NuReweight
• G4NuPHysicsLists	• ParticleNavigation
	• RandomUtils
- Create new products that contain:
 - Independent parts that experiments need more control over
 - Version-specific products with LArSoft version-indep interfaces to those parts

Example: decoupling Genie version



The current configuration

Example: decoupling Genie version



Status of nutools re-factoring

- Status
 - The re-factoring will be rolled out incrementally
 - No detailed plan for this yet
 - Begin this week: nutools 3
 - Genie will be cleanly factored out of nutools
 - GenieGen module will still live in larsim
 - Next release of LArSoft will therefore still be tied to specific version of Genie
 - Applies to the Genie v3 test release
 - Details can be found on the nutools wiki under “NuTools 3”
 - https://cdcvs.fnal.gov/redmine/projects/nutools/wiki/NuTools_3

Removing unused services and modules

- Kyle and Saba presented a list at the last LCM
 - Modules and services thought to be obsolete, and that can be removed
 - Important to remove unnecessary code
 - Many changes may be needed to that remaining to ensure thread safety
- Received feedback from a few people
 - Removed all of the requested items from the list
- The full list slated for removal can be found here:
 (On LArSoft wiki under LArSoft internals / Services and modules scheduled for removal)
 - https://cdcv.sfnal.gov/redmine/projects/larsoft/wiki/Services_and_modules_scheduled_for_removal

Removing unused services and modules

- The list...

AggregateEvent
 AggregateVertex
 BeamFlashCompatibilityCheck
 BezierCalorimetry
 BezierTrackerModule
 BoDataFrameInput
 CornerFinder
 CosmicClusterTagger
 CosmicPCAxisTagger
 CosmicPFParticleTagger
 CosmicTracker
 Disturbance
 EmptyFilter
 EventMaker
 EventMaker
 FinalStateSelectFilter

FlashClusterMatch
 fuzzyCluster
 FuzzyClusterMerger
 HarrisVertexFinder
 MergeEMShower3D
 MergeSimSources
 MergeWireCell
 NUANCEGen
 ParticleDecayId
 RecompressRawDigits
 RemoveIsolatedSpacePoints
 SimpleClusterMerger
 SimpleLineCluster
 ToyOneShowerGen
 TrackTimeAssoc
 VertexMatch

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?
 - Have heard nothing so far...

The end