

# **New upcoming features in the CI system**

## **LArSoft Coordination Meeting**

**May 23, 2017**

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(Fermilab)**

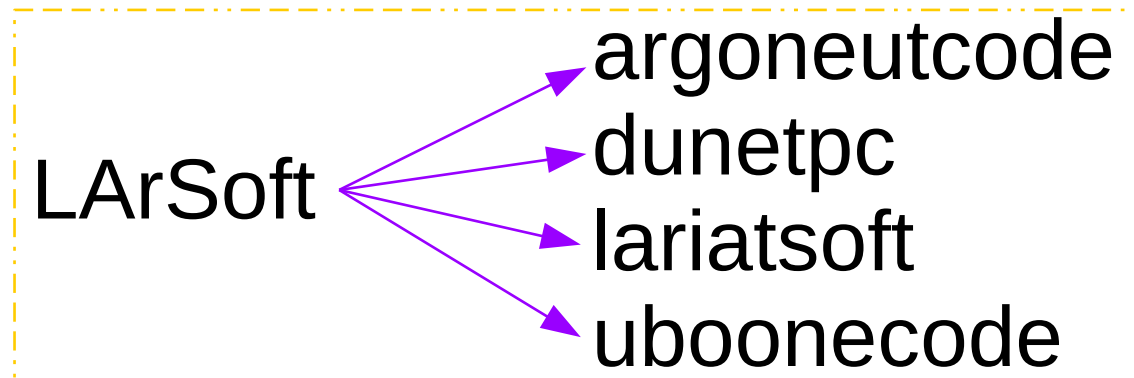
# Introduction:

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- Few weeks ago there was a meeting initiated by some ProtoDUNE/DUNE representative about the CI
  - The goal was to get the ProtoDUNE/DUNE community more involved in the CI system and make sure that they can get advantage of the service provided by the CI system
  - To accommodate the ProtoDUNE/DUNE request, the CI team proposes new features for the CI system

# CI workflow:

- The CI workflow will be reorganized to use independent build area for LArSoft and each of the experiment code
  - LArSoft and the experiment codes will use an independent build area
  - each experiment code build/test will depend on the same build of LArSoft



- The experiment codes will not interfere each other

# CI email report:

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- Use independent mailing list for each experiment code
- By default, send the email report only for CI builds that don't succeed (?)
- The email report will contain experiment specific information
- Send the report only if a CI build don't succeed
- Enable the “blame user” feature to send the email report also to the user that broke the code
- Add support for independent mailing list for each CI test
  - Interested users can be notified if a specific CI test fails
- The overall scope of these changes is to get the developers aware of the overall code status sending an email report only if needed

# CI trigger:

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- The trigger initiated by a *git push* in the monitored repository will be more selective on the packages to build/test
  - if the *git push* will happen in a LArSoft repository, all LArSoft + exp code packages will be built/tested
  - If the *git push* happen in an experiment repository `<expcode>`, only LArSoft + `<expcode>` will be built/tested
- For the *manual* trigger, the user will still be able to choose a workflow that build:
  - the expcode standalone
  - the expcode together LArSoft
  - LArSoft with all of the expcode's

# CI web application:

- The updated CI web application will show code specific information in different tabs

## The LArSoft tab

Multiplatform Continuous Integration for Test

Navigation: LArSoft | ArgoNeuT | DUNE | LArIAT | uBooNE

Builds table:

Build ?	Start Time ?	Build Type ?	checkout ?	build ?	unit_test ?	install ?	Progress Legend
<a href="#">lar_ci_test/562</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-19 20:27:44.203362	slf6 e14:prof	✓	✓	✓	✓	Running
<a href="#">lar_ci_test/561</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 18:28:34.956635	slf6 e14:prof	✓	✓	✓	✓	Pending
<a href="#">lar_ci_test/560</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 17:23:56.387914	slf6 e14:prof	✓	✓	✓	✓	Succeeded
<a href="#">lar_ci_test/559</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 17:00:59.769562	slf6 e14:prof	✓	!	?	?	Warning
<a href="#">lar_ci_test/558</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 15:49:28.487411	slf6 e14:prof	✓	✓	✓	✓	Failed
<a href="#">lar_ci_test/557</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 14:07:20.727823	slf6 e14:prof	✓	✓	✓	✓	Skipped
<a href="#">lar_ci_test/556</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 12:55:12.090743	slf6 e14:prof	✓	✓	✓	✓	Running
<a href="#">lar_ci_test/555</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 11:18:53.571453	slf6 e14:prof	✓	✓	✓	✓	Pending
<a href="#">lar_ci_test/554</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 09:35:46.904422	slf6 e14:prof	✓	✓	✓	✓	Succeeded
<a href="#">lar_ci_test/553</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-17 18:05:29.600736	slf6 e14:prof	✓	✓	✓	✓	Warning

Filters:

Select builds: From build:  # of builds:

Select date range: From:  To:  [Update] [Clear]

Select platforms:

# CI web application:

- The updated CI web application will show code specific information in different tabs

The uBooNE tab

LArSoft | ArgoNeuT | DUNE | LArIAT | **uBooNE**

### Multiplatform Continuous Integration for Test

Navigation: [Home] [Help] [Refresh]

Select builds:  
From build:   
# of builds:

Select date range:  
From:   
To:

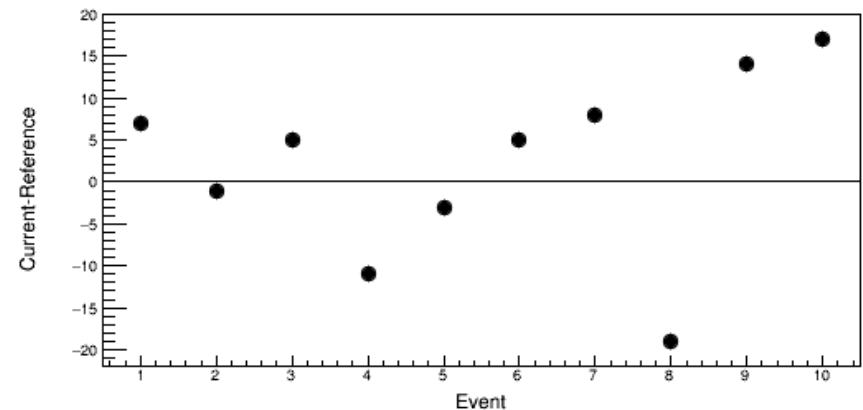
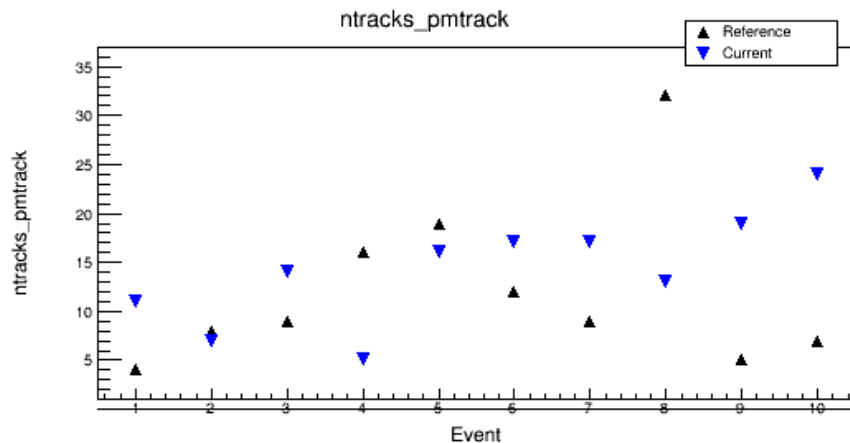
Build ?	Start Time ?	Build Type ?	checkout ?	build ?	unit_test ?	install ?	ci_tests ?	Progress Legend
<a href="#">lar_ci_test/562</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-19 20:48:10.359510	slf6 e14:prof	✓	✓	✓	✓	✓	Running
<a href="#">lar_ci_test/561</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 18:48:38.411309	slf6 e14:prof	✓	✓	✓	✓	✓	Succeeded
<a href="#">lar_ci_test/560</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 17:43:31.628075	slf6 e14:prof	✓	✓	✓	✓	✓	Succeeded
<a href="#">lar_ci_test/558</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 16:09:25.535470	slf6 e14:prof	✓	✓	✓	✓	✓	Succeeded
<a href="#">lar_ci_test/557</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 14:27:29.208105	slf6 e14:prof	✓	✓	✓	✓	✓	Succeeded
<a href="#">lar_ci_test/556</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 13:23:55.607773	slf6 e14:prof	✓	✓	✓	✓	✓	Succeeded
<a href="#">lar_ci_test/555</a> (LArSoft ArgoNeuT DUNE LArIAT uBooNE)	2017-05-18 11:38:50.794608	slf6 e14:prof	✓	✓	✓	✓	✓	Succeeded

Select platforms:

# Second tier CI test suite

- The second tier CI test suite will provide a CI test that compares variables from the anaTree output
  - This CI test will provide more extensive info on the reproducibility of the code output
  - The CI tests analyze 10 events, if there are differences, an email report will be sent to a CI test specific mailing list

ntracks\_pmtrack\_comparison



This shows the comparison of the number of tracks reconstructed using the *pmtrack* algorithm



**Thank you!**

**Question? Comments?**

