



# Trigger Simulator Status

## *Trigsim Meeting*

Dugan O'Neil and Angela Bellavance

oneil@fnal.gov, bellavan@fnal.gov

# Outline

- Intro/News
- Documentation
- Goals/Design
- Current Status
- Summary

# Intro

- The d0trigsim package produces a combined L1/L2/L3 executable capable of running on Data or MC inputs.
- Executable Managers: Dugan O'Neil and Angela Bellavance.
- Certification: Josh Dyer

# Goals

- Some Goals:
  - Evaluate trigger efficiencies and rejection on MC and data samples for triggers before they are run online
  - Test and debug online trigger software before it goes online
  - Verify performance of trigger algorithms and calculate efficiencies after the fact

# Documentation

- Homepage: <http://www-d0.fnal.gov/computing/trigsim/trigsim.html>
- Contains cookbook instructions, status of each release, talks, trigger lists docs, etc.
- Mailing list: [d0trigsim-users@fnal.gov](mailto:d0trigsim-users@fnal.gov), archived at <http://listserv.fnal.gov/archives/d0trigsim-users.html>

# Status

- in p11, MC with default trigger list certified since p11.08. See certification webpage. p11.13.00 changed L2 muon geometry, otherwise only fixing online problems.
- p11 running online in L2 and L3 right now. Offline – too old in L1.
- p12.04.00 is currently recommended. Should go online in L2 and L3 soon.
- p13.00.00 - please don't try to use this. We'll send out an announcement when p13 is useful. p13.01.00 (start October 15) has potential. L2 Tracking is a big change.

# Infrastructure Status

- Recently moved to auto-generation of L3 branches based on trigger list in d0trigsim and d0\_analyze.
- Known issues:
  - L3 on data cannot have rdc\_run\_config\_mgr also running. Jon Hays is testing fix.
  - level2.sim-stripped needs hand-editing. Needs Elizabeth to add to DB.
  - level3.sim needs hand-editing for L3 cal unpacking and tracking. Fixes to both in testing for p13.01.00
- p13.01.00 really has a lot of potential...

# Summary

- p12 about to go online in L2 and L3. p12.04.00 recommended for offline use.
- p13.00.00 isn't pretty. p13.01.00 has promise (October 15 +). Hand-editing of L3 list, run\_config problems should go away.
- Trigsim working as part of mc\_runjob. Ready for farms? Just need trigger list.
- Please look at certification plots! Now for multiple lists!