



# Online Software Status

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- Infrastructure
- Recent changes (Run 2)
- Towards Run 3 (slowly)



# Infrastructure

- GitLab

- Users seem to have adapted - with a few glitches
- Some even really like using branches

- CMake & build system

- Basically working
- But nightly build still not as reliable as before
  - I have not found time to work on it...
  - To do list includes: Git submodules, continuous integration, CDash, VMs for building, etc



## Run 2: Recent Changes (1)

### • L1Topo

- Continual small patches to improve reliability
- Improvements in calibration scripts
- Tweaks to programs to check for mismatches etc

### • Simulation

- Lots of work by Bruce and Steve to fix many issues
  - Still a few left to return to full working P1 simulation

### • RodMon

- Work by Bruce (almost finished) to split the two different functions of the old rodmon into separate applications:
  - (1) Comparisons of hardware vs simulation in test partitions
  - (2) Data integrity checks when running in the ATLAS partition



## Run 2: Recent Changes (2)

### • PPM

- Minor changes for new readout modes in ReM firmware
- Allow individual rate metering thresholds
  - Quieten a few towers that irritate shifters

### • Database (PPM)

- Major change to PPM COOL folders
  - Split attributes to those common to high/low mu and those specific to high or low mu conditions
  - Extra folder to chose mu strategy updated by expert script
- In use since the start of 2017 data taking
  - Changes now also implemented offline

### • Database (Receivers)

- New Receiver COOL folder: HVCorrections
  - Split stable gain corrections from those due to volatile LAr HV changes
  - Just started using this new scheme during the MD/TS



# Towards Run 3

- Progress in python...
  - Lots of standalone module tests using python scripts
- Not much progress in TDAQ framework
  - C++ packages remain pretty empty (some for >1 year)
  - But Juraj plans to work on FTM soon...
  - And work on gFEX is ramping up: training session for Eva and Ben two weeks ago, to be following up with vidyo discussions...
  - General plan: HW control and simulation for each module type