



Muon HIP Software Status

Jim Pivarski, Alexei Safonov

Texas A&M University

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What will be in CMSSW_1_6_X (CSA07)

- ▶ RecoMuon: muon hits now use alignment parameter errors (useful for deweighting hits)
- ▶ HIPAlignmentAlgorithm: added option to select hits based on pull (residual / uncertainty)
- ▶ AlignmentProducer: can now write to the database (bug fix)
- ▶ CommonAlignmentMonitor: added pull distributions, Z mass/ χ^2 per iteration
- ▶ Python scripts: lookup “hardware IDs” \leftrightarrow raw DetIds in both directions, everything now works as promised including 3-D viewer, twiki has a recipe for running on and off of lxplus

Of course, we are not limited to 1_6_X in our studies.



Available data/Monte Carlo samples (see hyperlinks)

- ▶ [1_5_2 validation samples](#): 5100 $Z \rightarrow \mu\mu$
- ▶ 100,000 $Z \rightarrow \mu\mu$ events requested in 1_5_3 (this month?)
- ▶ Millions of mixed events in CSA07 (September)
- ▶ [Spring 07 samples](#): won't work for us because they're in 1_3_1, but if the new samples are not forthcoming, I'll create a back-port of the relevant software
- ▶ Beam-halo Monte Carlo: needs to be reconstructed
- ▶ Cosmic ray Monte Carlo? (for comparison with MTCC)
- ▶ [MTCC](#): recipes available for reconstruction, full-scale production will begin soon
- ▶ Slice test? GREM?