REST Status

- REST data produced over the weekend now on /work disk (Kei)
  - /work/halld/data_monitoring/RunPeriod-2014-10/ver09/REST
- Data that I've looked at so far (nominal time offsets look OK):
  - ~14 M events with FCAL trigger: runs 1501-1525
  - ~200 M events with FCAL-BCAL trigger: runs 2140-2420

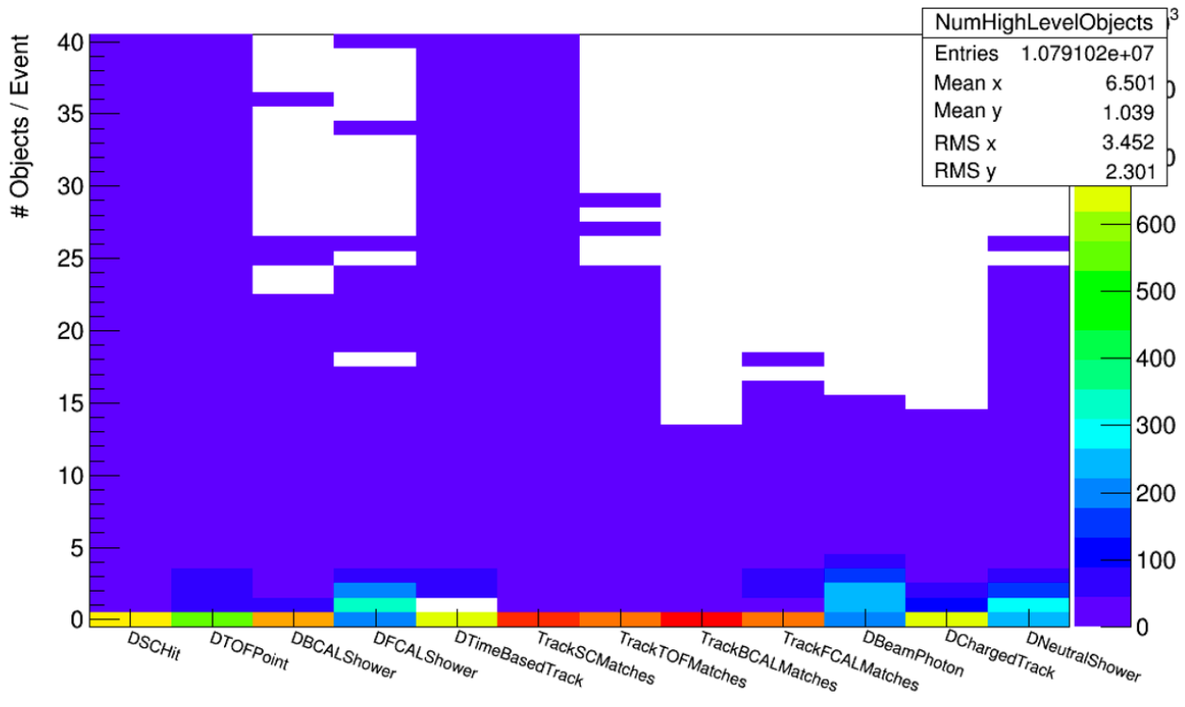
Calibration and software updates

- Tagger time offsets in CCDB (Simon)
- CDC time offsets in CCDB (Mike, et al.)
- CDC resolution update in CCDB (Mike, et al.)
- DBeamPhoton's now in REST format (Paul and Nathan)

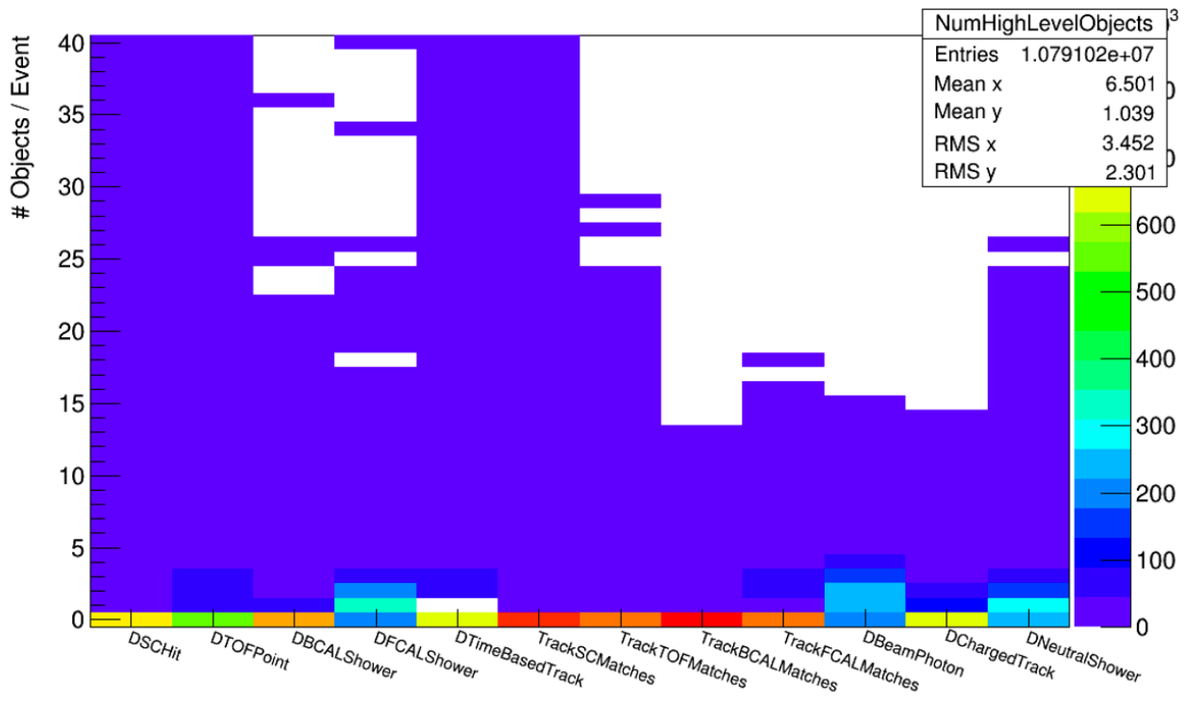
REST vs EVIO

- Disk space difference:
  - REST data occupies 114 GB for the full Fall commissioning dataset
  - Run 1520 (FCAL trigger): 20 GB EVIO / 55 MB REST = x350
  - Run 2400 (FCAL-BCAL trigger): 20 GB EVIO / 33 MB REST = x600
- Speed difference (running $p\pi^+\pi^-$ plugin with -PNTHREADS=6):
  - 6 kHz REST / 200 Hz EVIO = x30 speedup

REST



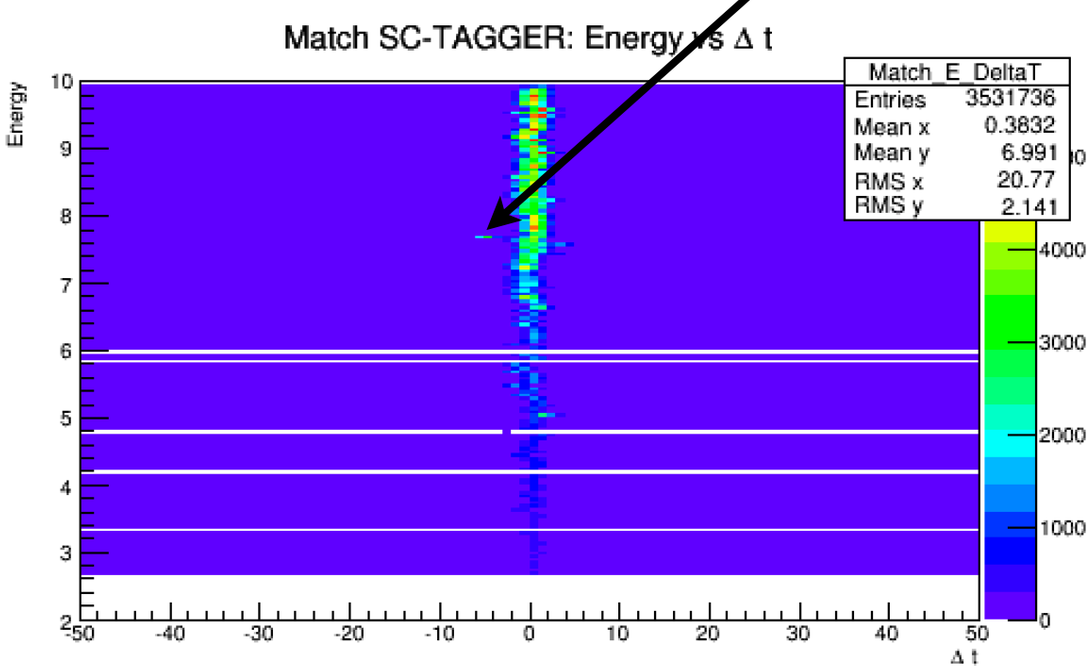
EVIO



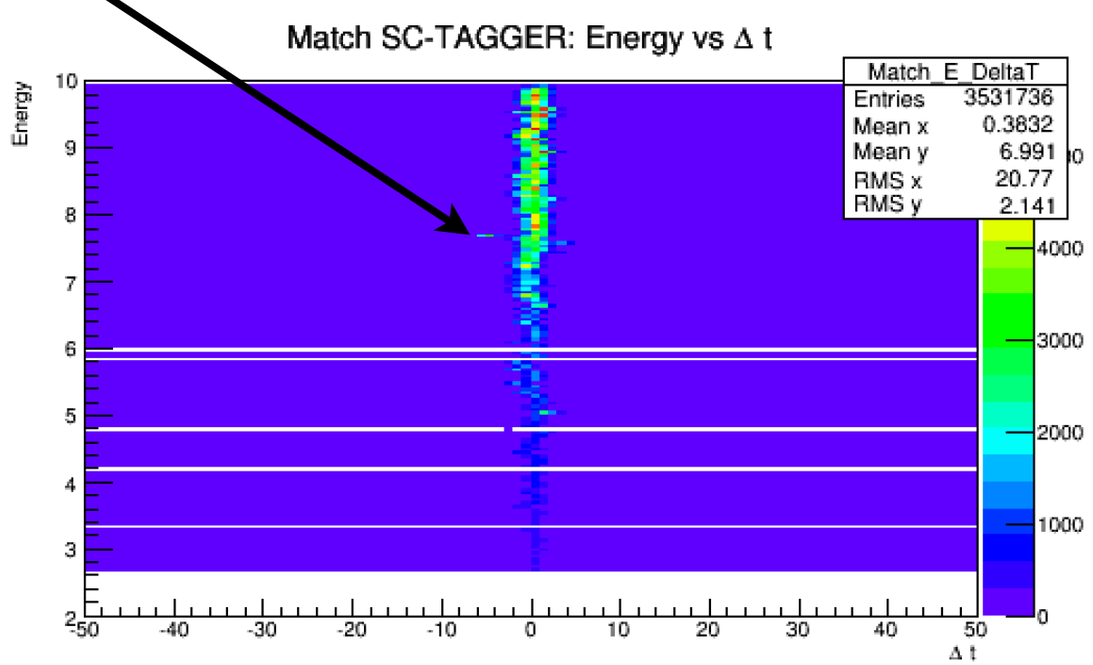
Time offset between SC and TAGM/H

- Require tracks have matched hit in SC
- Use pathlength to determine time of SC hit propagated to the target
- Now Δt (SC-TAGM/H) centered at 0 without ad-hoc correction
- Possible issue with TAGM timing (TDC time offsets?)

REST



EVIO



FCAL trigger: runs 1501-1525

Time offset between SC and TAGM/H

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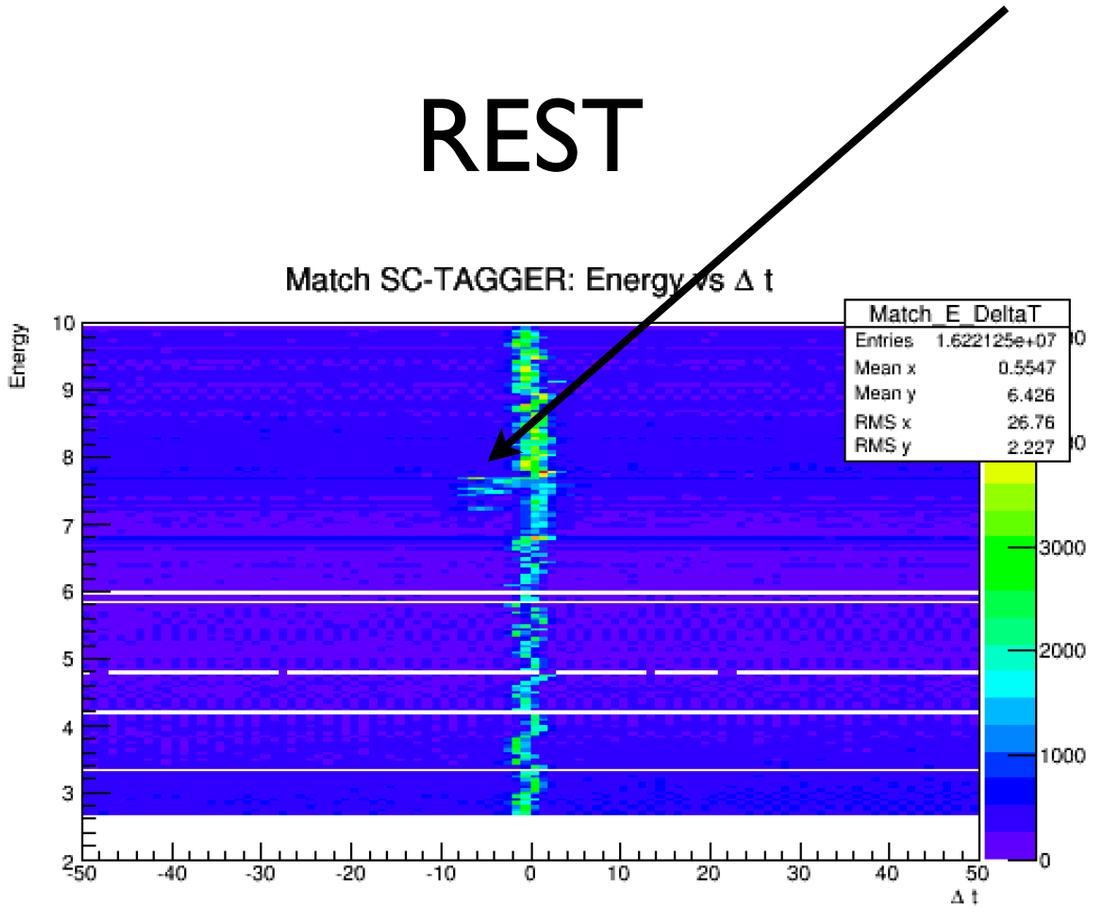
REST



EVIO

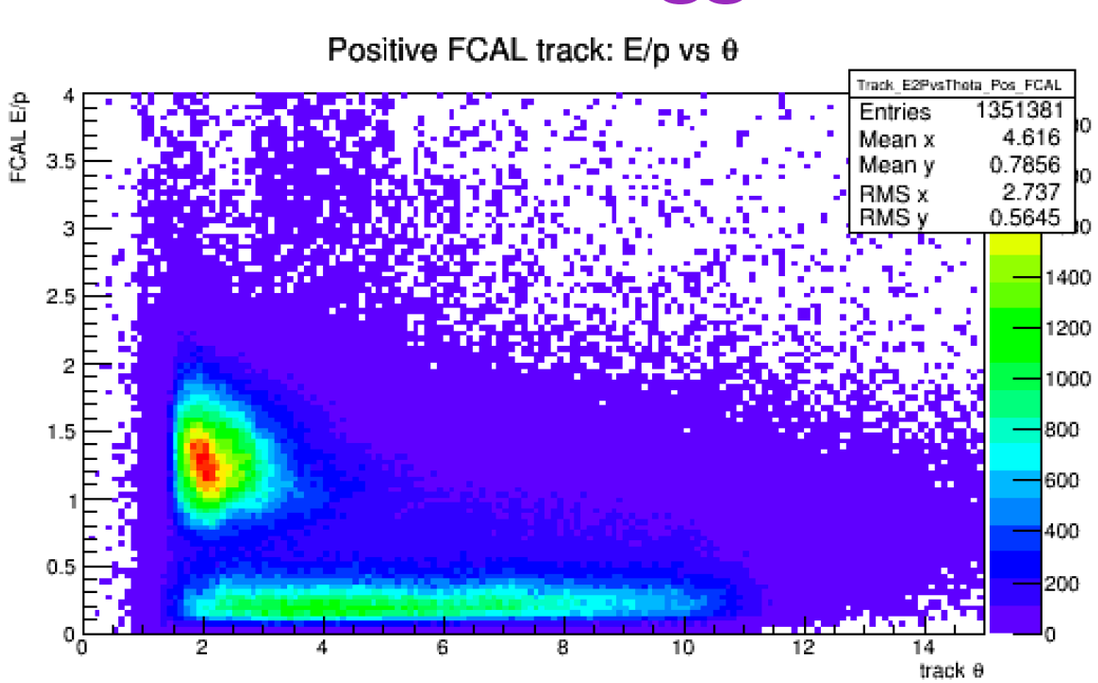
Haven't run over full statistics

FCAL-BCAL trigger: runs 2140-2420

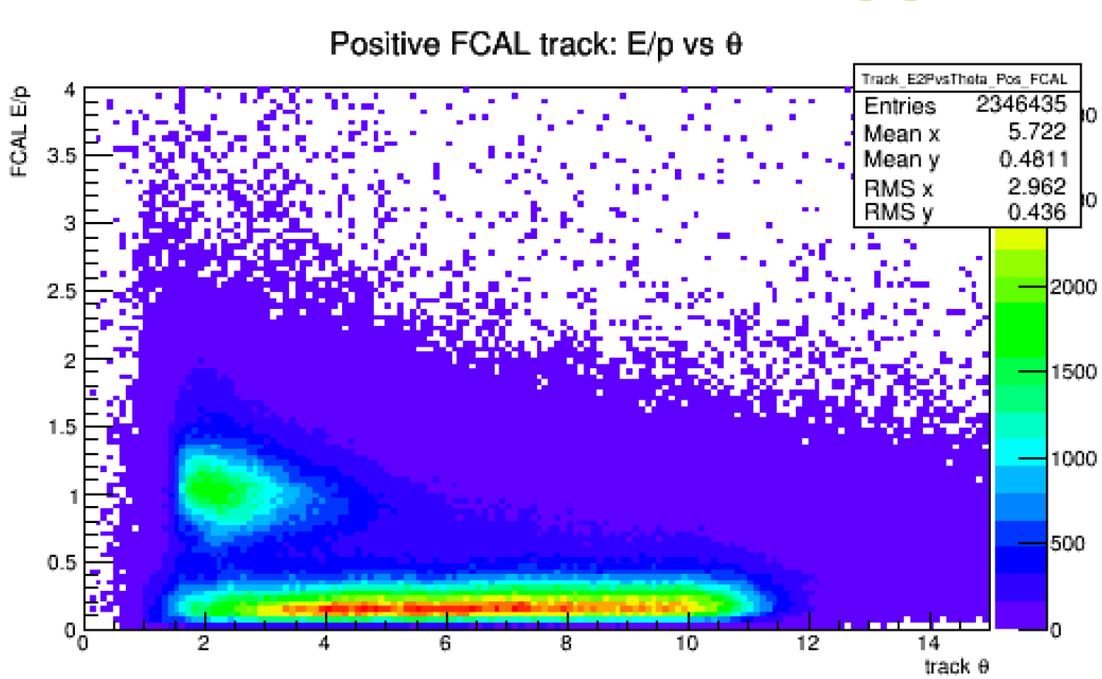
FCAL energy scale

- FCAL gain changed at run 1770
- CCDB constant (/FCAL/digi_scales) adjusted to compensate
- No Non-linear correction for DFCALShower energy
- E/p peaks above 1 for early data (FCAL trigger)

FCAL trigger



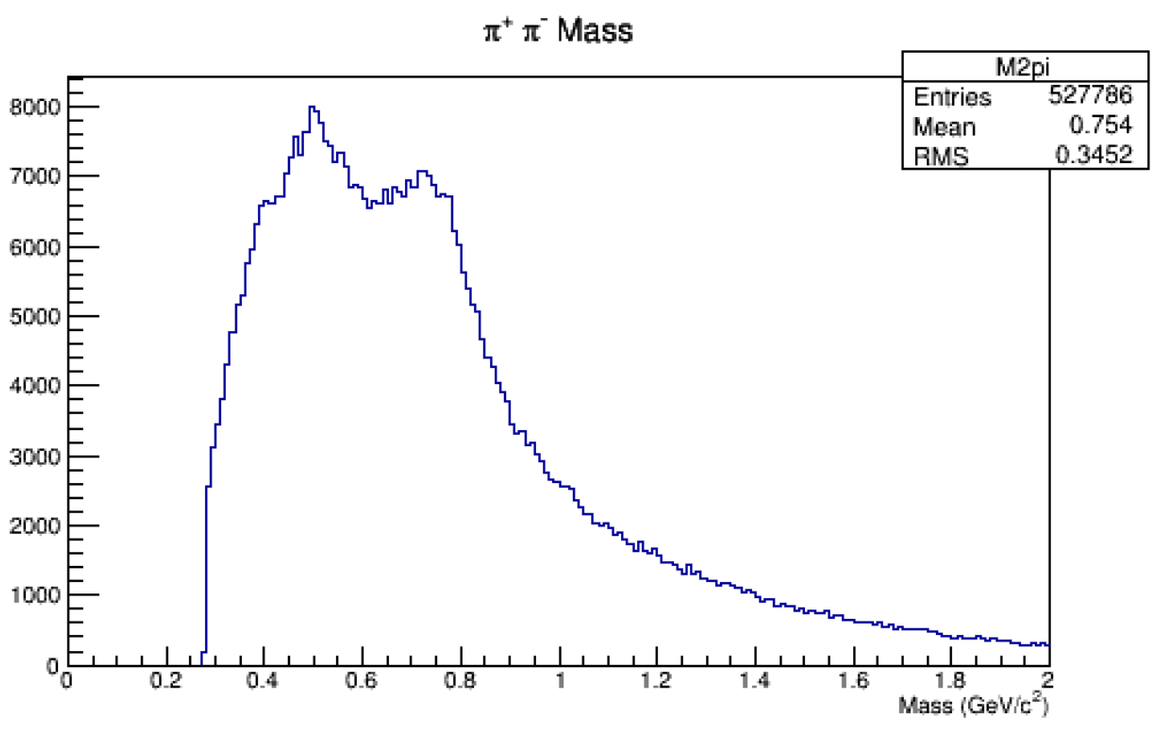
FCAL-BCAL trigger



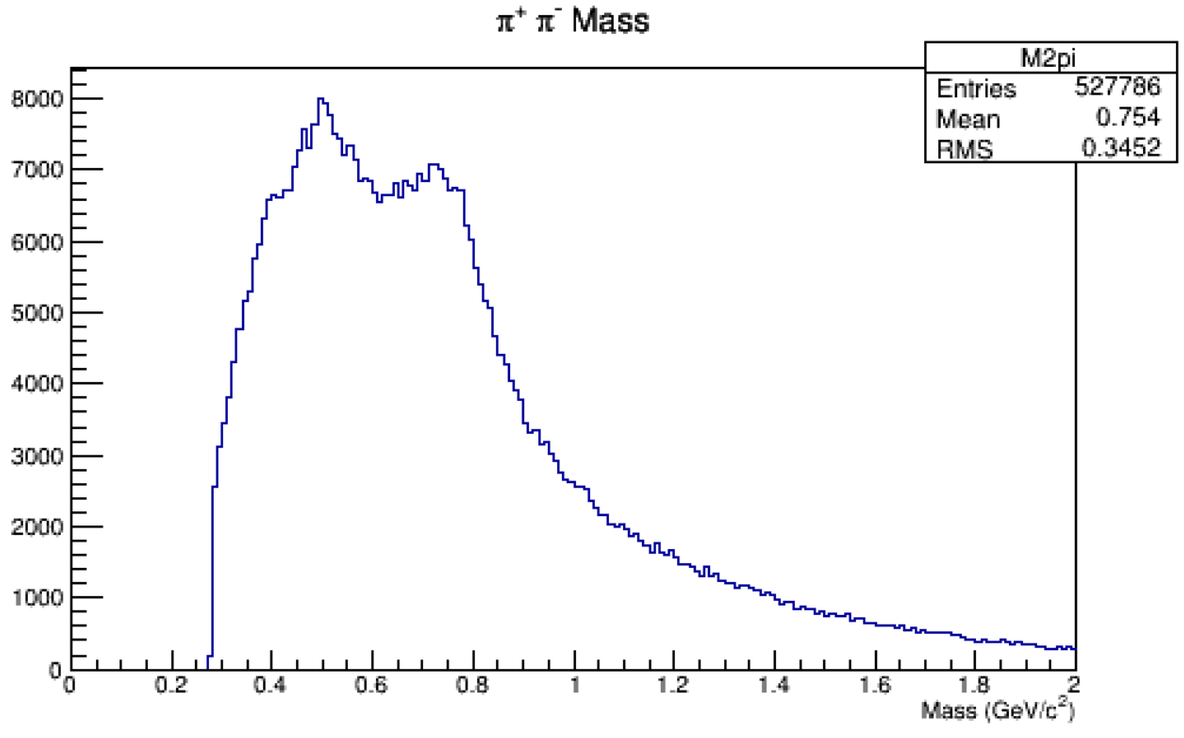
Things still to work on

- Nominal timing offsets for SC/FCAL/BCAL/TOF ok, but **don't** use default PID algorithms
- Some small differences results after kinematic fit...

REST



EVIO



Input Particle Combos

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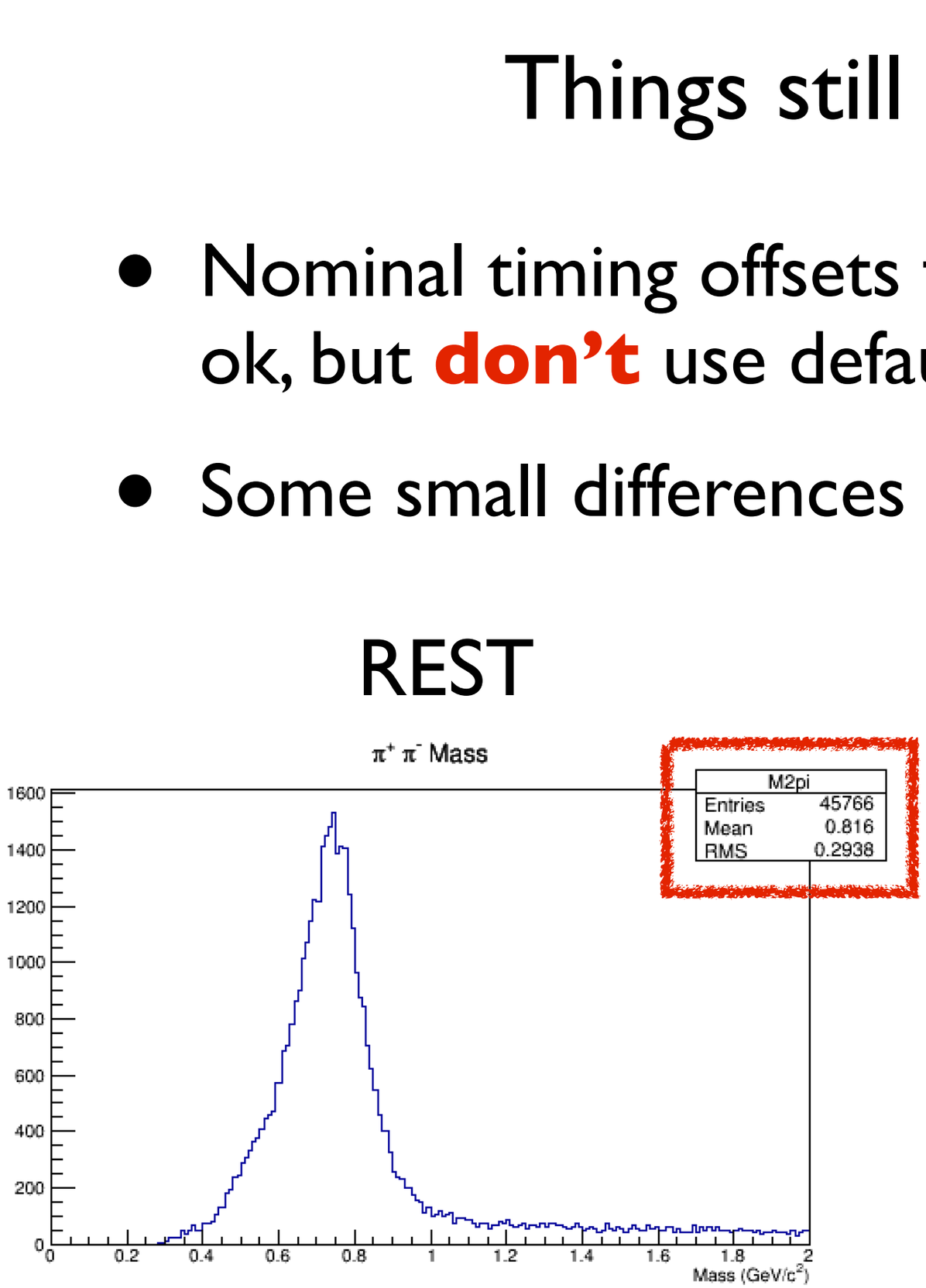
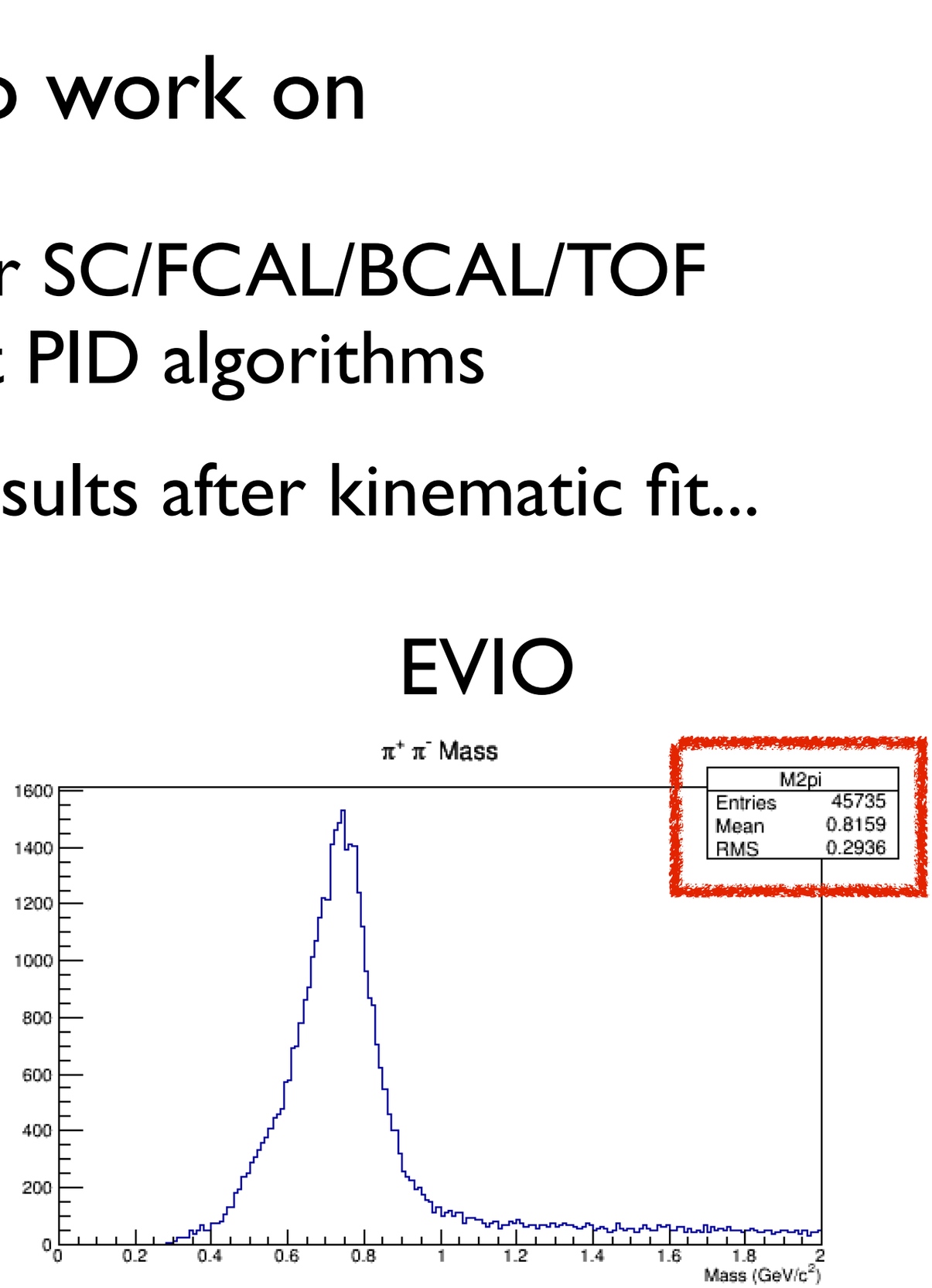
- Some small differences results after kinematic fit...

REST



EVIO



After Kinematic Fit Cut