Thinking about a pass1 for 2019/2021

Matt Graham
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Why a new pass?

- As shown in last weeks workshop, there are quite a few people working on improvements to the reconstruction for 2019/2021
- Some of these are done, some are "done", and some are less done but it could be useful to have a checkpoint
- I find that it focuses people (me) to get things completely completed if there is a deadline and a prize at the end (the prize here would be data reconstructed with their improvements in)

What a new pass?

- Alignment improvements (PF/Cameron)
  - It doesn't make sense to do this if there are not significant improvements to alignment
- SVT hit reconstruction/cluster recon (Rory)
  - Offline pedestals/online noise
  - This will include opening the delta(t) for adding hits to cluster (Norman)
- SVT hit timing calibration (Matt)
- Include timing in KF track finding (we may want to slide this)
- Any other recon issues?

What a new pass? (MC)

- I think we want to (officially) produce some MC with this pass
  - Not huge samples…enough to compare features, rates
- Use random triggers for beam overlay instead of MC
- Use individual ECal parameters (taus in particular) for readout
  - Make turn-on curves more realistic…better ECal cluster smearing?
- Dead channel list for SVT and ECal

What a new pass? (content)

- Probably just do same as pass0 (files that end with XXX30-XXX40) and all files from any special runs
  - This isn't too expensive in either time (cpu or person) or disk space
- I would like to include (in slcio and hpstr) a few things
  - Unbiased hit residuals for each layer
  - Unbiased track-sensor intersect position for each layer (even without hit-on-track)
  - Track state at each layer + at target + ecal
  - All raw SVT hits in event

When a new pass?

- I think there is still plenty to learn from pass0 so there is no need to rush into this…however we will get to a point soonish when want a coherent data/MC set with the state of the art in order to do real analysis studies
- As mentioned, I think we need to have significant, material improvement in alignments compared to pass0 before we do this plus the things discussed today…I can make a "punch-list" if we can agree on a set of tasks
- Is ~late summer (e.g. August) sound sensible?
- As an aside:
  - SLAC JIRA
  - Or, just (a new) git-hub? Confluence? Something else?