

### sPHENIX Software Status

# Production and Tools Cameron Dean

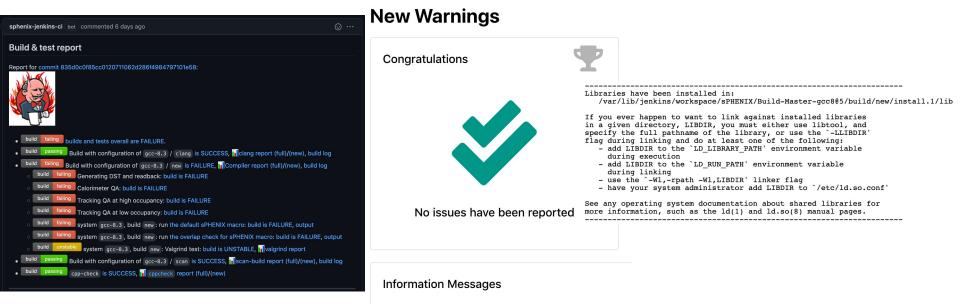
05/17/2021

Heavy Flavor Topical Group

# Heavy Flavor Tools



- No updates on DecayFinder and Anti-trigger
- KFParticle: Changes were pushed
  - Jenkins complained
  - No error was recorded though? Maybe accidentally picked up some other issue?



## **MDC** Production



- Min-bias production was attempted but crashed
  - Traced down to events with no silicon seeds or low number of tracks
  - This meant initial vertexing would segfault
  - Fix has been implemented
- Chris tried to start signal reprocessing to recover truth matching
  - I kept distracting Chris which has delayed this, sorry

#### This PR fixes a few issues in the Acts::IVF:

- 1. It adds a catch for the case where there are no silicon seeds produced. In this case, the IVF returns a dummy vertex of (0,0,0)
- 2. It adds a catch for the case where the number of silicon tracks is less than the number of centroids in the initial silicon stub cleaning algorithm. In this case, the number of centroids is just set to 1. This only occurs when there are a small number of tracks (i.e. less than 5).
- 3. It updates the random number generator used in the centroid clustering algorithm to use that of the RANDOMSEED flag, so that results are reproducible if a random seed is set at the top most macro level.