Status Weekly Ξ^0_c analysis meeting, July 2nd, 2020

- **Goals**
  - Long-term:

    a. Reproduce existing results by Jinjoo Seo, by using p + p @ 13 TeV

    b. Extend the results by:

      b-1. By minBias or high multiplicity trigger (HMV0 or SPD_HM)

      b-2. By separating multiplicity percentiles into two (0.1 – 30 and 30 – 100 (%))
  - Short-term:

    a. Get used to the ALICE analysis framework Δ

    b. Run existing code (by Jinjoo) in Grid Δ

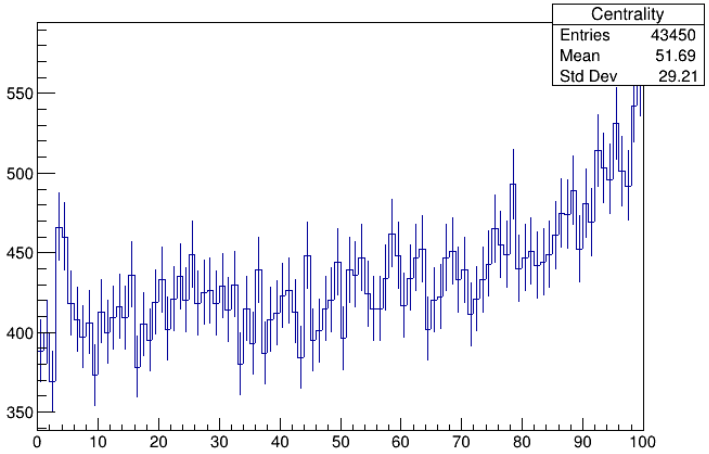
- **Status**
  - Still playing w/ Grid: job submit, manage, retrieving results, etc

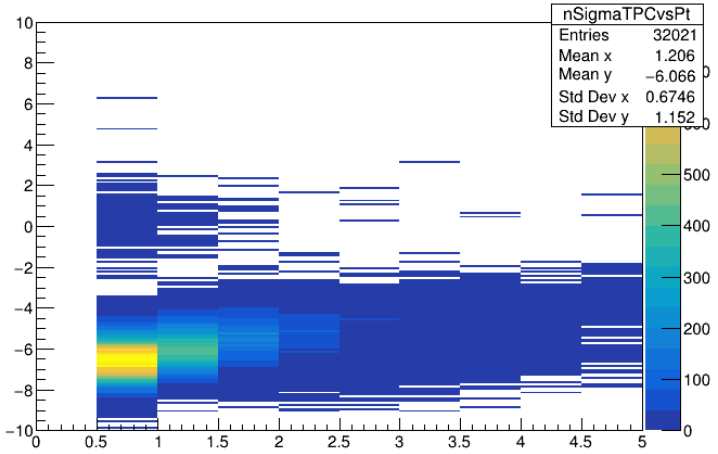
    * I'm doing this by comparing a couple of code packages: Jinjoo's code and tutorial
  - Basically, I intended to run Jinjoo's code package as it is, w/o change anything,

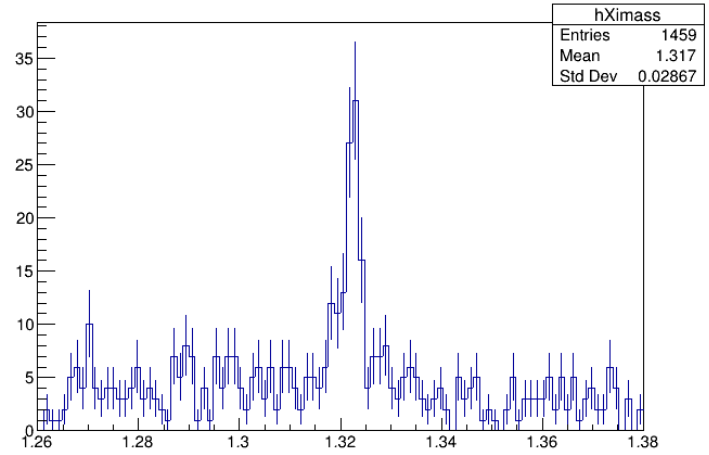
    but it looks it's inevitable to modify it at least for its steering macros
  - Anyhow, I ran Jinjoo's code in Grid for a single run (LHC17m - 279000)

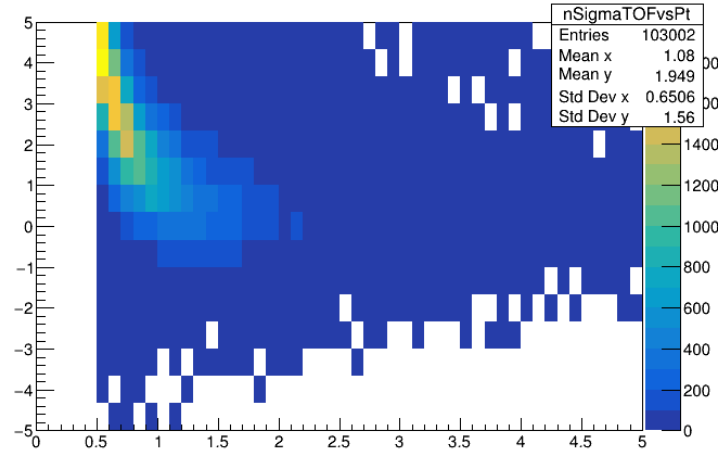
Status A few sample plots by running Jinjoo's code

– Results from single segment of run 279000 (total 15 segments exist)









Status etc.

- **Slow progress**
  - Basically, the time I can spend is 2 days / week
  - It looks overall ALICE framework is well written and stable, but,

    a. Some instructions in the tutorial are obsolete

    b. Multiple analysis environments exist (local-KIAF, Grid, and LEGO train),
    and I'm still studying all of them and get used to

    c. Reference code (Jinjoo's) is written WRT ROOT5, but my alidock is complied with ROOT6.
    Although the end-user can specify the ROOT version to be used in the analysis via alien,
    but it seems the user's ROOT environment is used at the moment of job submission
    (for instance, I cannot use *gROOT->LordMacro(…)* at all in any steering macro)

  - At the very least, main analysis task codes (*AliAnalysisTaskSEXic0Semileptonic.**) are NOT touched
  - Plan to have stable Grid steering macro to run Jinjoo's code,
    then get entire statistics of period LHC17m (108 runs) –
    I (naively) assume it'd be sufficient to check later steps of offline analysis

LAST SLIDE

Backup Quote from V0M percentile studies (by B. Volkel, D2H, June 26)