Status Weekly Ξ^0_c analysis meeting, July 10, 2020

- **Status**

  - Cross checked Jinjoo's code in multiple environments:

    a. Analysis code (AliAnalysisTaskSEXic0Semileptonic.*) is always the same

      * Added a suffix "New" to avoid library in AliPhysics being loaded

    b. Two types of xCheck conditions:

      b-1. By steering macro (either my macro or Jinjoo's macro w/ minimum modification)

      b-2. By Environments (alidock or KIAF)

    c. Performed cross checks: by using data LHC17m – run 279000,

      * All library version in Grid is the same as vAN_200322-1 (ROOT5)
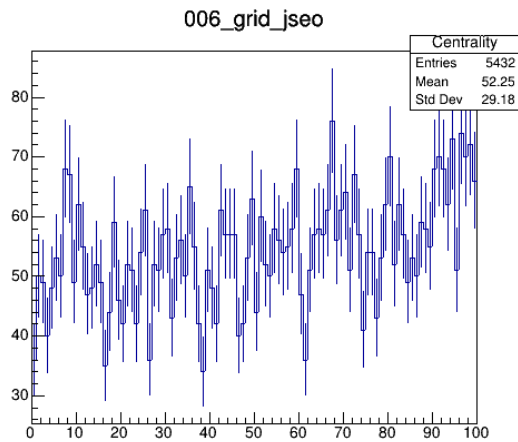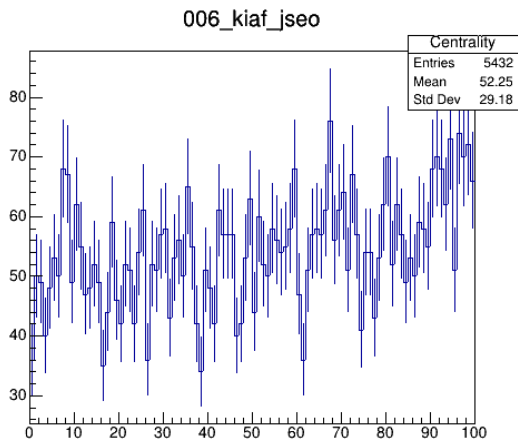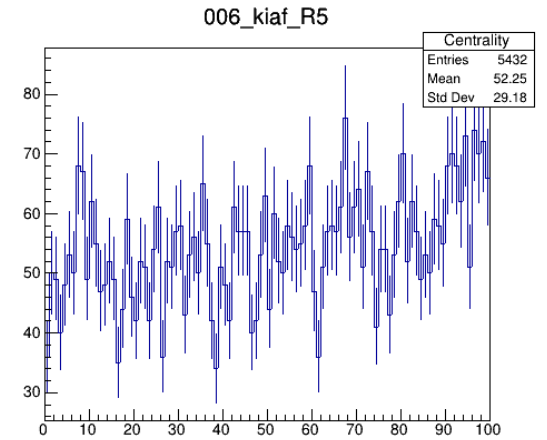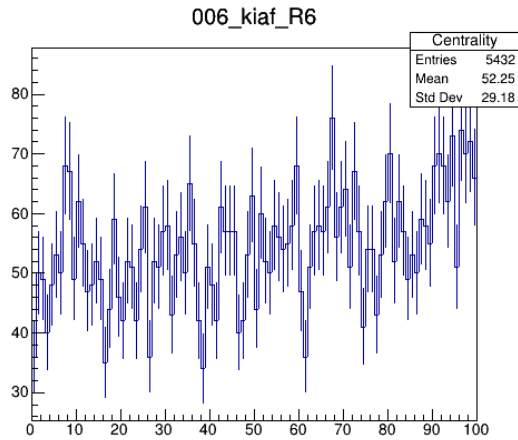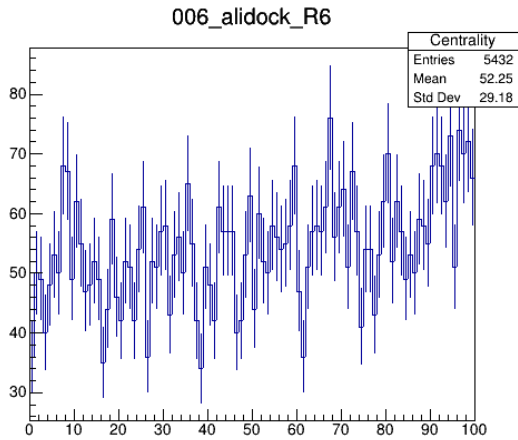
      c-1. My macro, alidock (ROOT6) + Grid

      c-2. My macro, KIAF (ROOT6, vAN_200701-ROOT6-1) + Grid
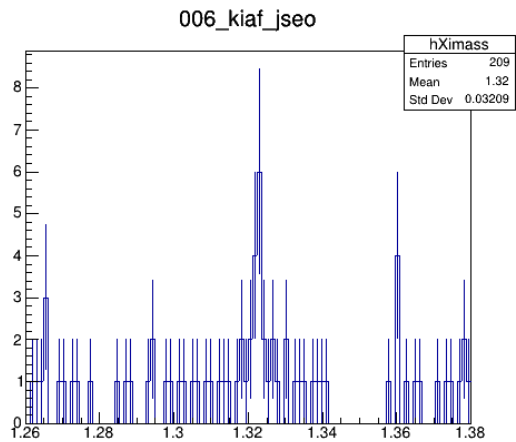
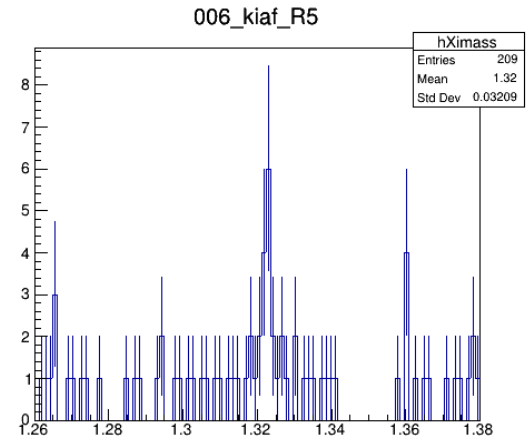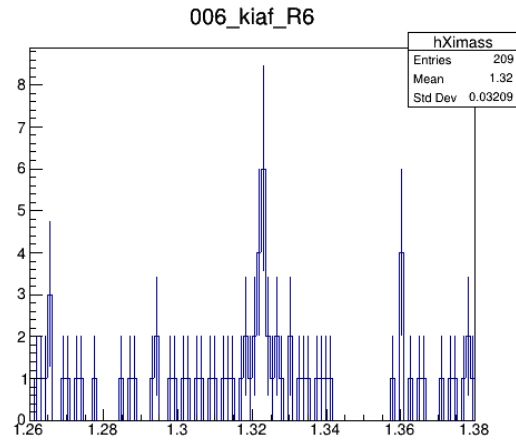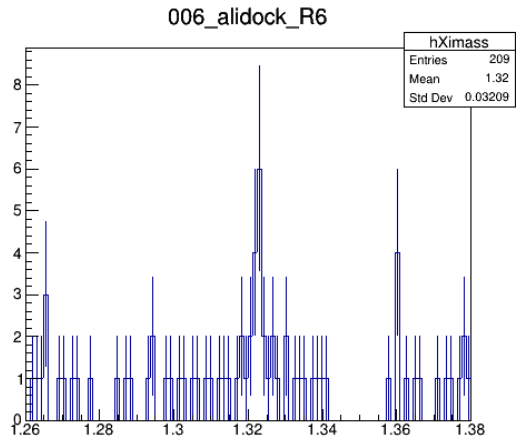   c-3. My macro, KIAF (ROOT5, vAN_200322-1) + Grid

      c-4. Jinjoo's macro, KIAF (ROOT5, vAN_200322-1) + Grid

      c-5. Results by Jinjoo (independent results obtained by Jinjoo, by her environment)

xChecks Centrality, LHC17m_279000, segment 6

xChecks   Xi mass, LHC17m_279000, segment 6
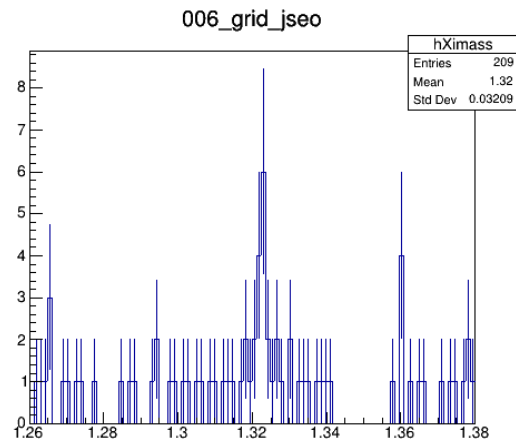
Summary and Outlook

- **Crosscheck**

  – All results show exact match for a few randomly selected segments

  – Also I compared <u>stdout</u> of my grid job and Jinjoo's grid job, by pick a random segment: almost exactly match

    * Differences originated from level of option 'PrintStatus()' or environment such as machine id

  – Aside from the crosscheck results, I plan to use KIAF (ROOT5) + Grid (vAN_200322-1) only afterwards

    * Some features such as merge does NOT work properly in alidock (ROO6) –

      it looks compatibility issue still lingers in ALICE framework

- **Next step**

  – Received offline analysis macro from Jinjoo

  – Plan to run entire period of LHC17m (108 runs): hopefully, it'd be sufficient to check next steps

  – Plan to add some minor features on Jinjoo's analysis code (AliAnalysisTaskSE…):

    a. Implement multiple triggers, select one later (ex. V0M) in offline analysis level

      * As long as I know, so far only kINT7 (V0AND minBias) was implemented
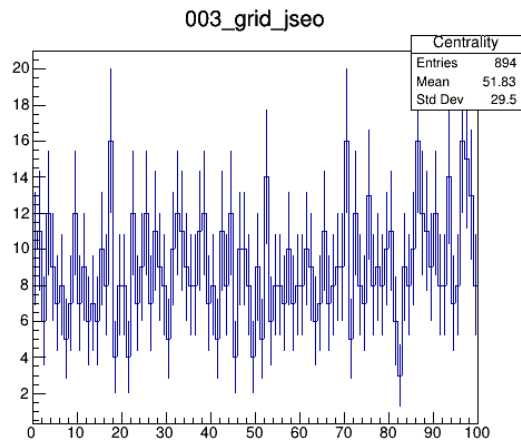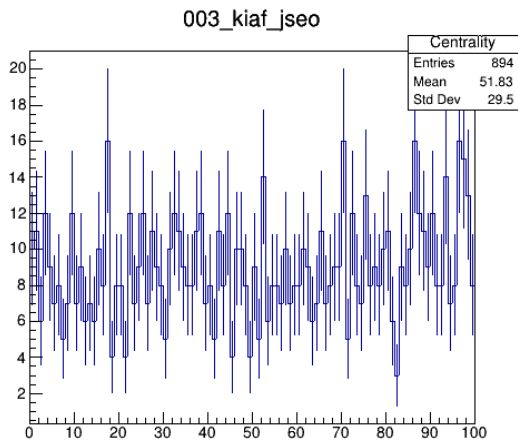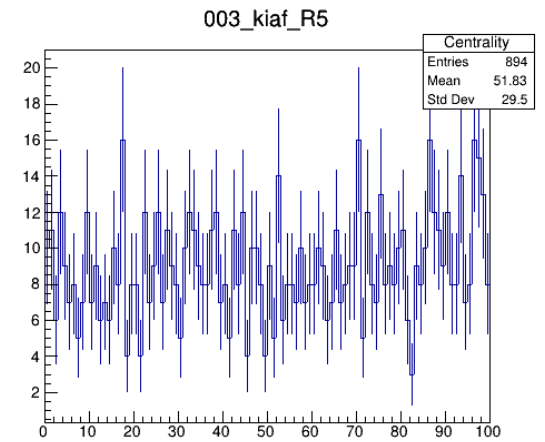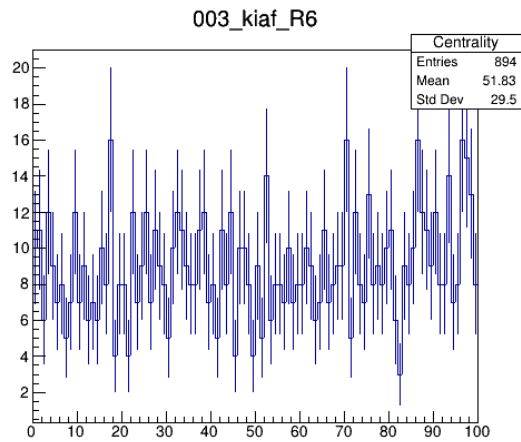
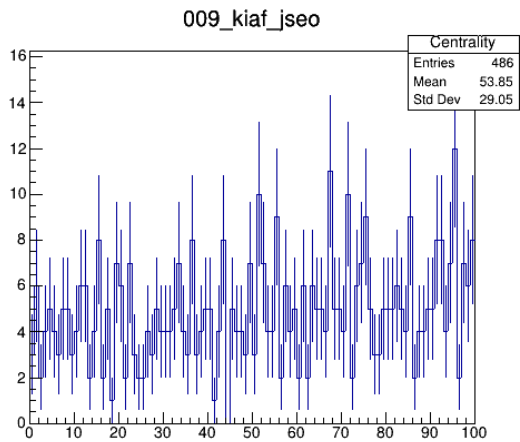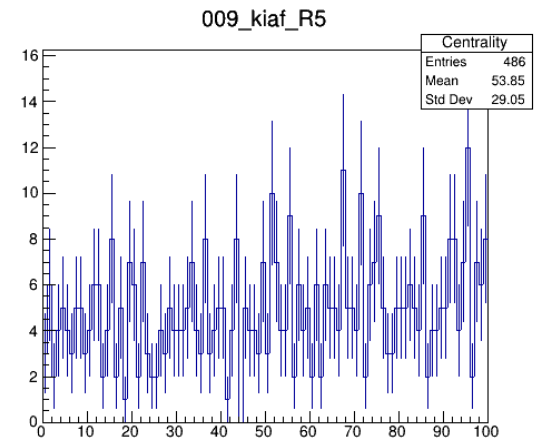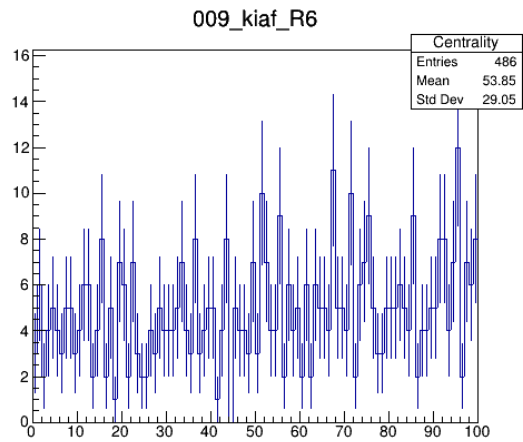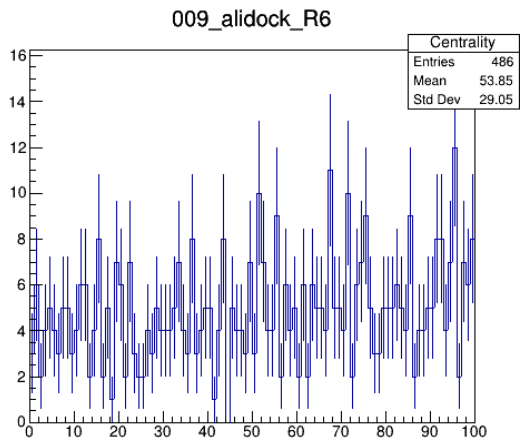   b. Multiplicity percentile (perhaps already exist?)

LAST SLIDE

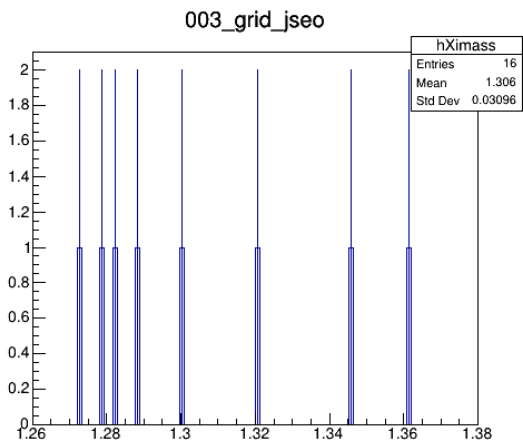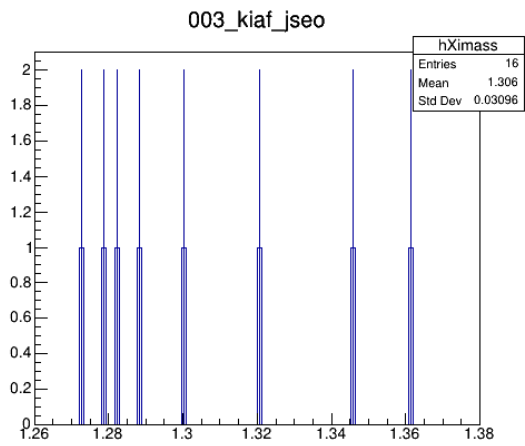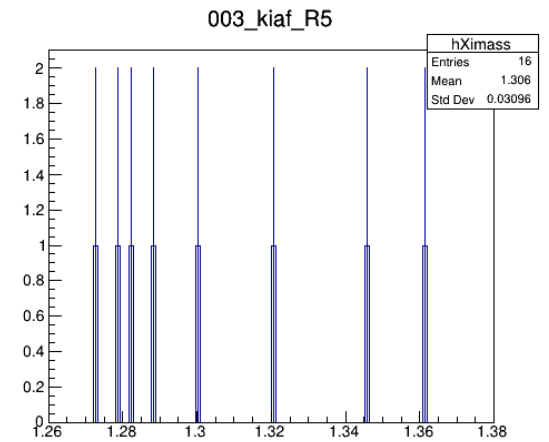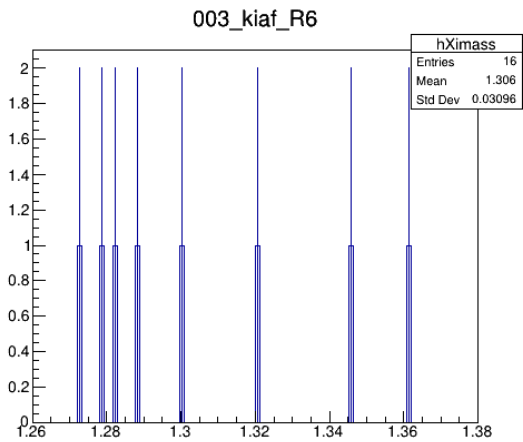**Backup** Quote from V0M percentile studies (by B. Volkel, D2H, June 26)
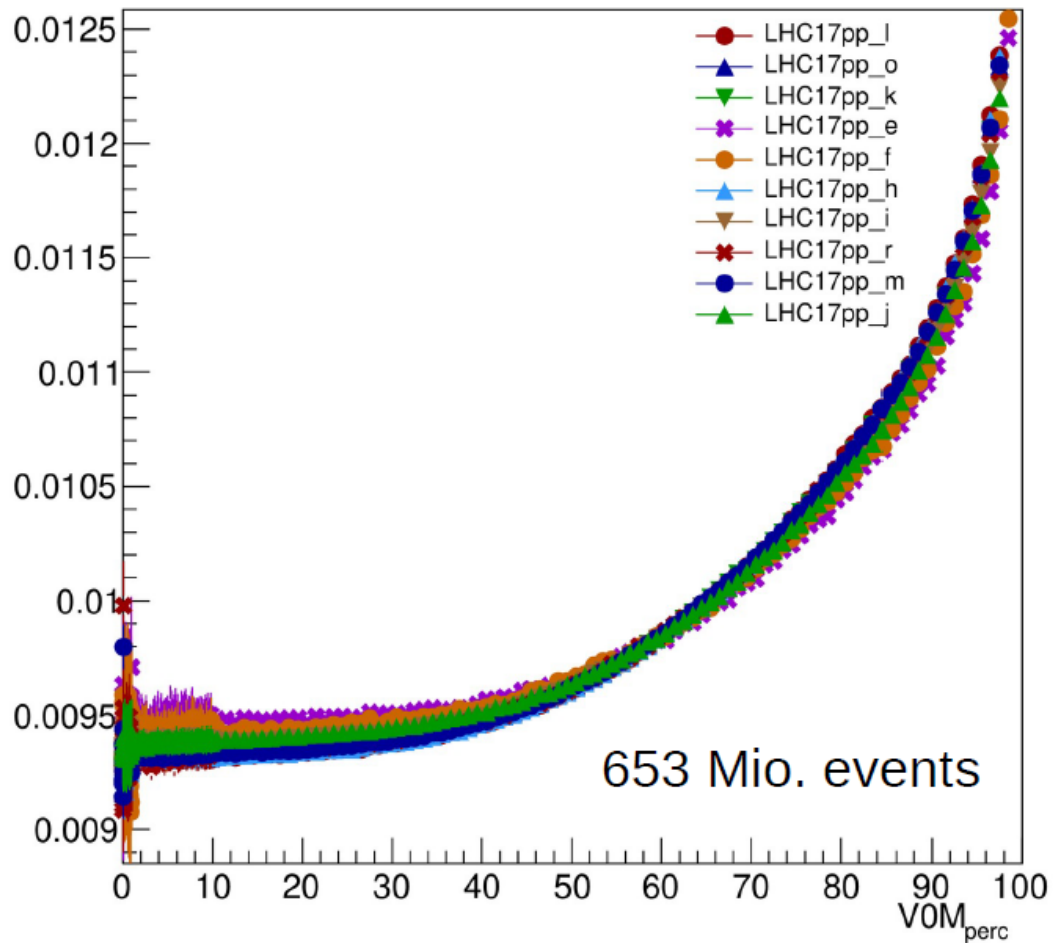
Backup   Centrality, segment 3
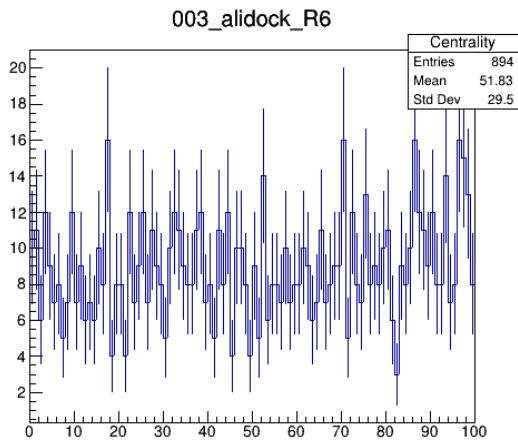
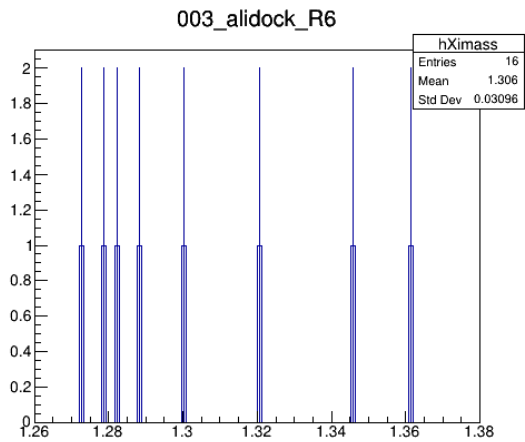# **Backup**   Centrality, segment 9
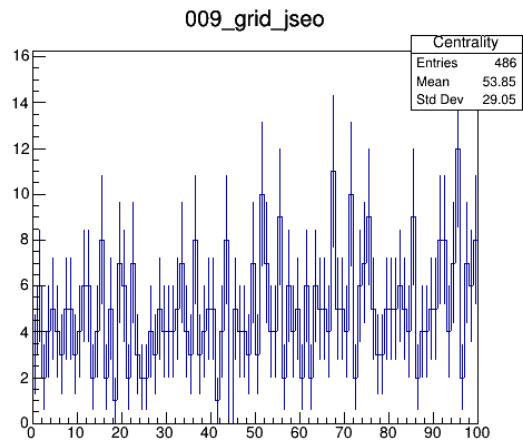
Backup Xi mass, segment 3

Backup   Xi mass, segment 9