# $\begin{array}{l} \mbox{Update on 00 event selection} \\ \mbox{for $R_{AA}$ 00 and data format} \end{array}$

Balázs Kovács, GM **OO meeting** May 29th 2025

## Skimmer content (work in progress)

- VY, VY, VZ: 3D position of the best vertex
- VXError, VYError, VZError: 3D error of the best vertex
- hiBin: centrality now updated according to the calibration table developed by Jing
- hiHF\_pf: HF E<sub>T,sum</sub> (quantity used for the centrality calibration)
- isFakeVtx
- **nVtx**: number of reconstructed vertices
- **HFEMaxPlus**: Max energy of the PF candidates (HF plus)  $3 < \eta < 5.2$
- **HFEMaxMinus**: Max energy of the PF candidates (HF minus)  $-5.2 < \eta < -3$
- ZDCsumPlus, ZDCsumMinus
- mMaxL1HFAdcPlus, mMaxL1HFAdcMinus
- Ncoll, Npart
- leadingPtEta1p0\_sel (computed considering only highPurity tracks)
- trkPt, trkPtError, trkEta, highPurity
- isData
- **sampleType** (Hijing, Starlight SD, Starlight DD, GammaUPC,..)
- HFEMaxPlus2, HFEMaxPlus3 (second and third highest E PF candidates within  $3 < \eta < 6$
- HFEMaxMinus2, HFEMaxMinus3 (second and third highest E PF candidates within  $3 < \eta < 6$
- ptSumVtx, nTracksVtx, ndofVtx, chi2Vtx for the best vertex
- As debug option, list of all the reconstructed vertex positions with corresponding properties

### Skims for Hijing, Starlight single diffractive and Starlight double diffractive samples are available here: /afs/<u>cern.ch/work/q/ginnocen/public/OOSkims</u> (run in debug mode)





## Todo for skim and software

- Adding DCA variables for tracks in the skims
- Started developing a baseline of the analysis software
  - event selection (and systematics)
  - track-by-track correction (with different tracking maps)
  - implementing trigger conditions for pp samples
  - validation of the pp charged hadron dN/dp<sub>T</sub> ongoing (thanks Vipul for the inputs!)



