

## 0.1 Event Selection and Mixing

The events used in this study were selected with the class `AliFemtoEventCutEstimators` according to the following criteria:

- Triggers
  - minimum bias (kMB)
  - central (kCentral)
  - semi-central (kSemiCentral)
- z-position of reconstructed event vertex must be within 10 cm of the center of the ALICE detector
- the event must contain at least one particle of each type from the pair of interest

The event mixing was handled by the `AliFemtoVertexMultAnalysis` class, which only mixes events with like vertex position and centrality. The following criteria were used for event mixing:

- Number of events to mix = 5
- Vertex position bin width = 2 cm
- Centrality bin width = 5

The `AliFemtoEventReaderAODChain` class is used to read the events. Event flattening is not currently used. `FilterBit(7)`. The centrality is determined by the “V0M” method of `AliCentrality`, set by calling `AliFemtoEventReaderAOD::SetUseMultiplicity(kCentrality)`. I utilize the `SetPrimaryVertexCorrectionTPCPoints` switch, which causes the reader to shift all TPC points to be relative to the event vertex.