Non-Prompt J/psi Analysis

PbPb @ 5.02 TeV

Himanshu Sharma

Mar 09, 2020

IFJ-ALICE Meetings

Activities -

- Results of Improver Task

Details -

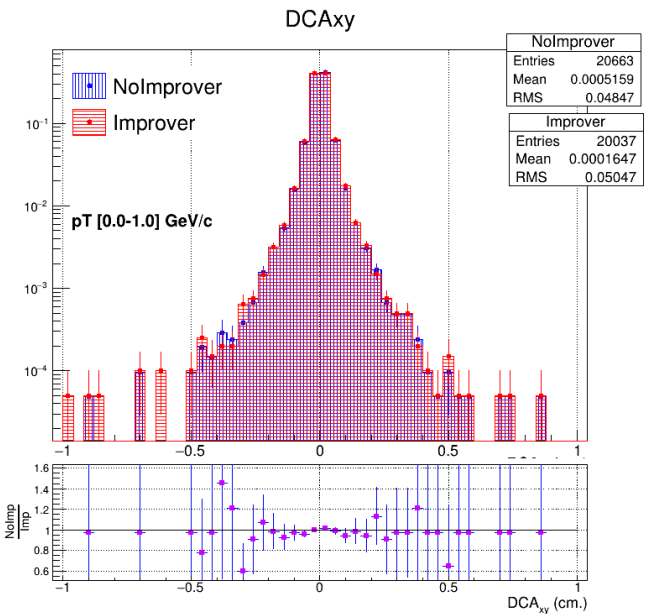
- Dataset : 92 runs - from LHC19f1b
  (Central_Barrel_Tracking list from DPG)

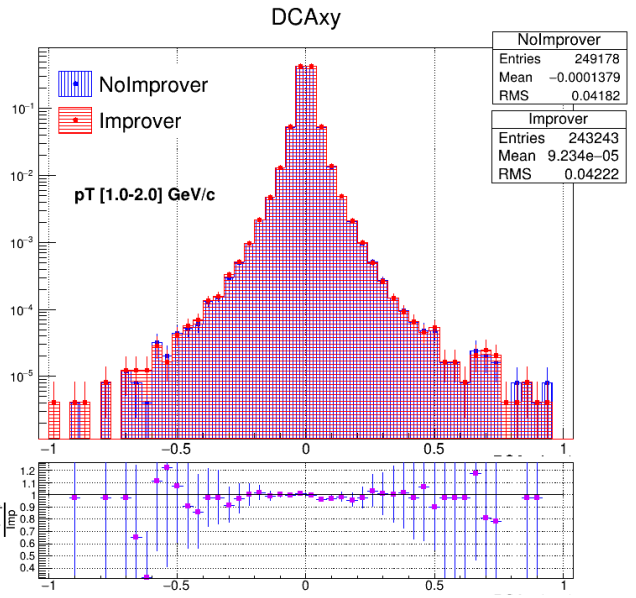
- 0-30% Centrality (PbPb)

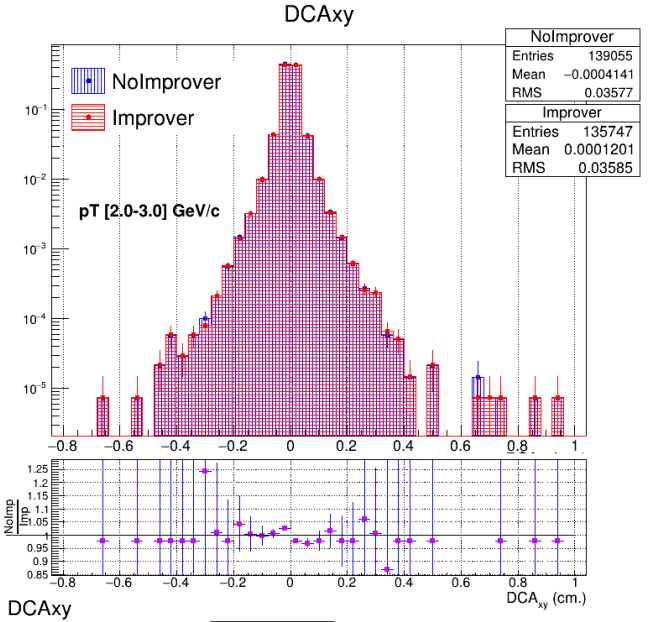
- Purpose : To match the DCAs in Data and MC

Results from Improver:

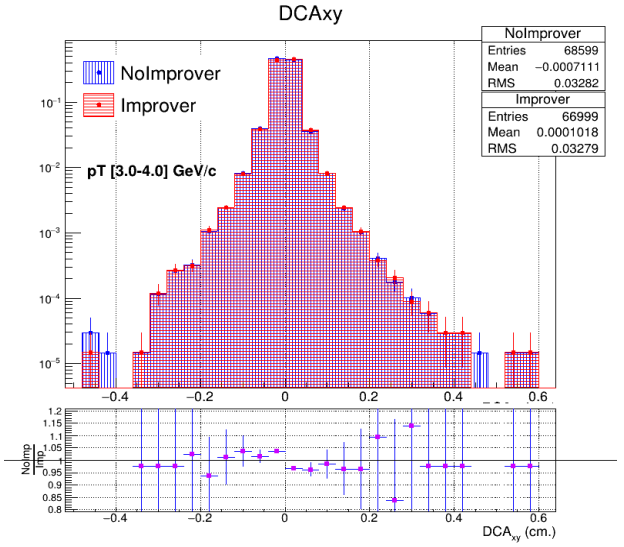
- The following results for are for True-Electrons (Prompt & Non-Prompt jpsi)
- 90 times more stats than last week.
- These results are for ~900K events.
- Default selection crieteria (See Backup)
- Compared Obsevables : DCAs & Lxy

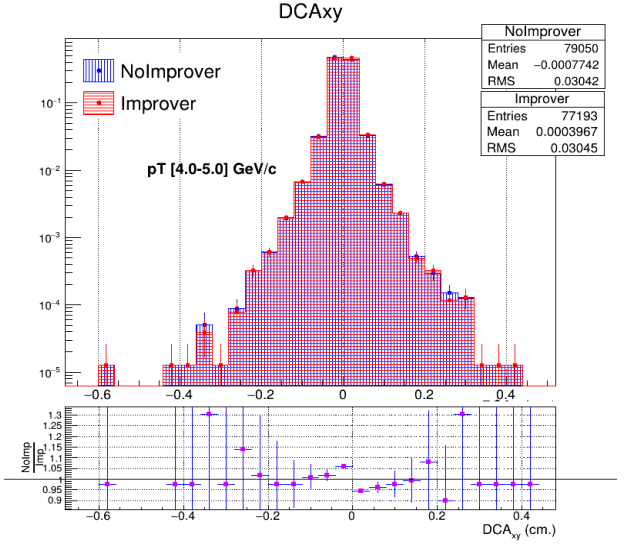


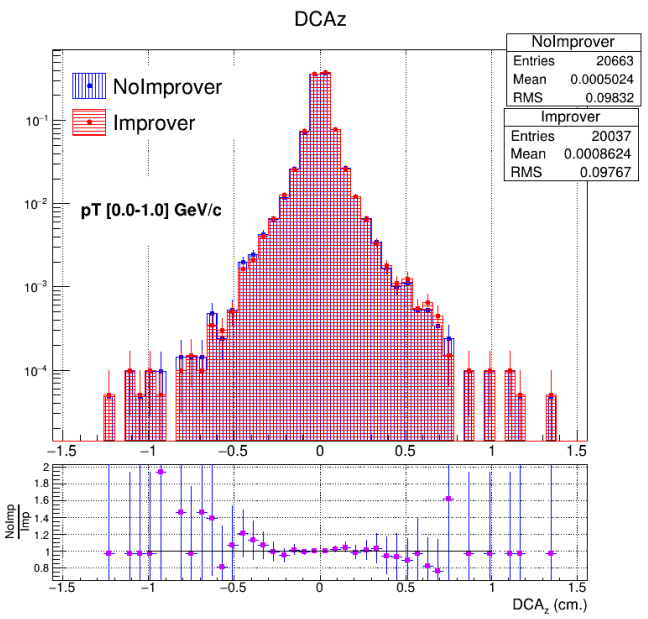


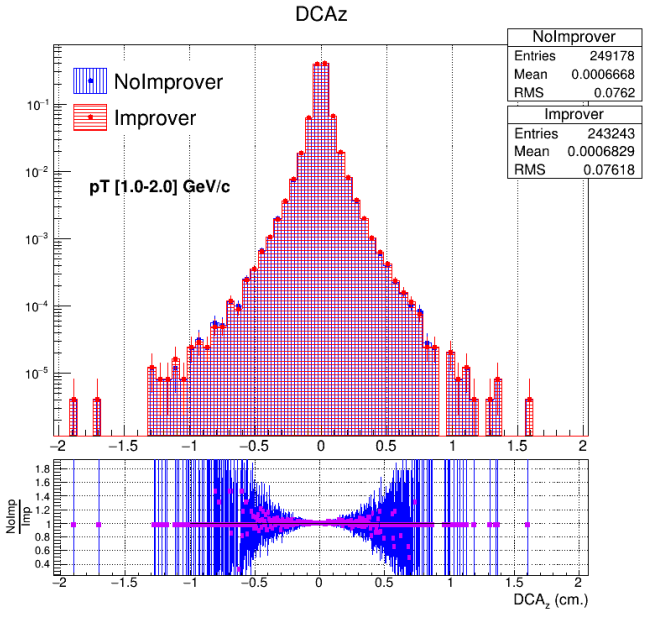


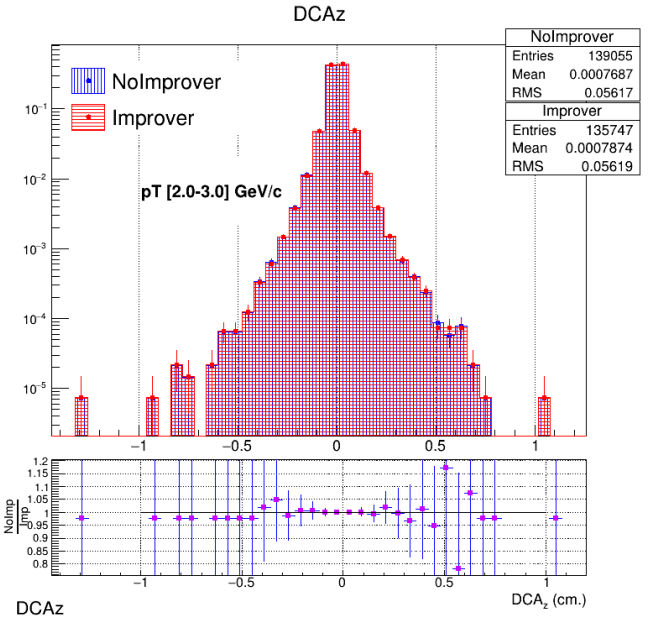
True-electron Non-Prompt J/psi



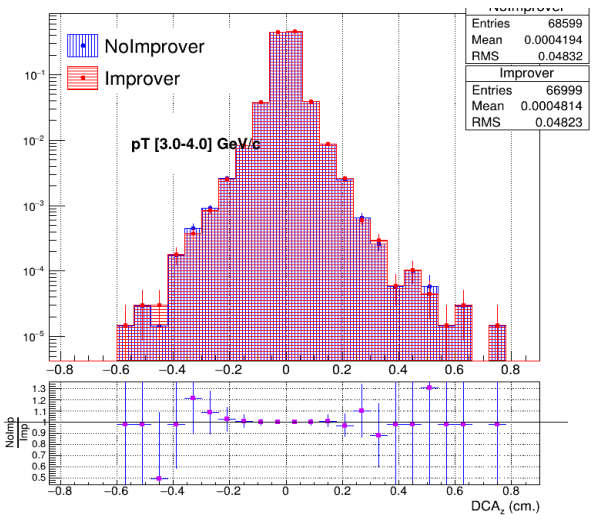


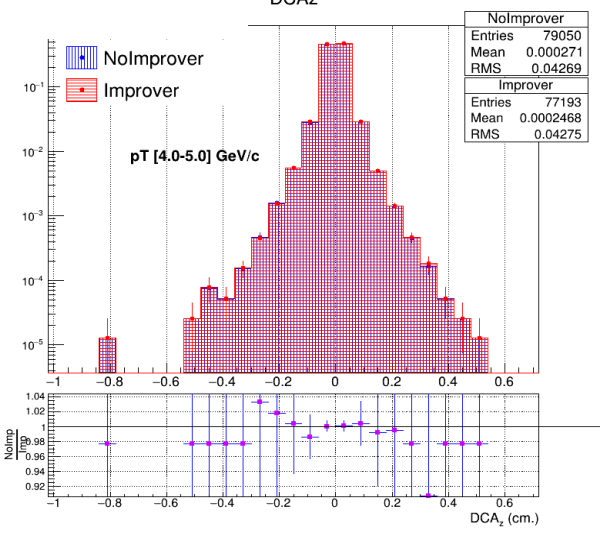


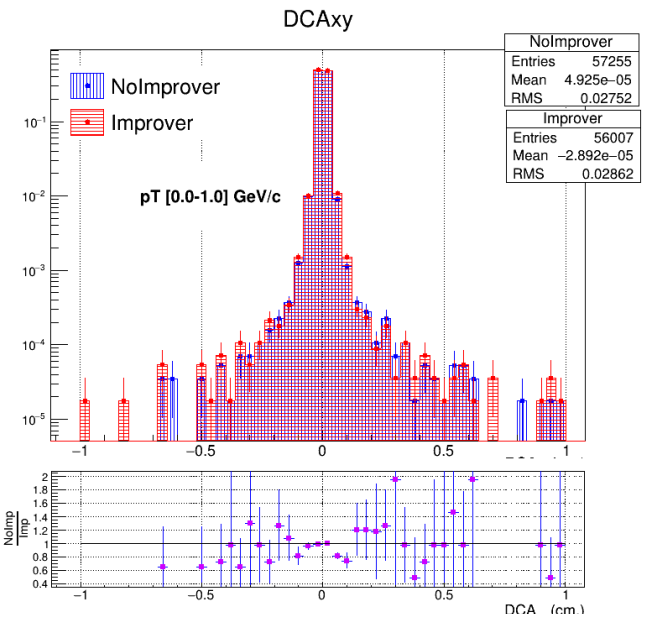


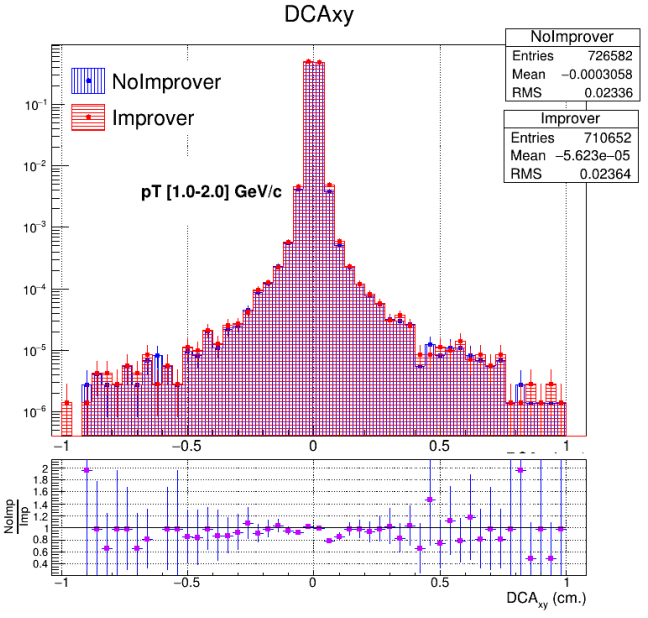


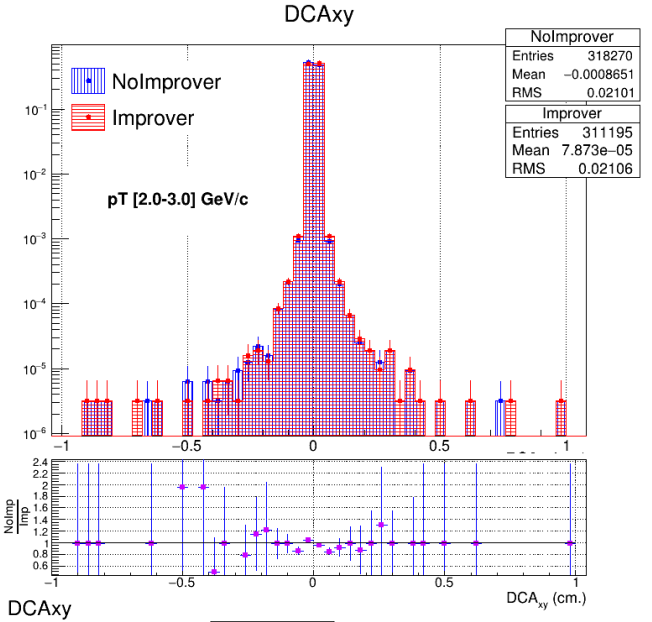
True-electron
Non-Prompt J/psi



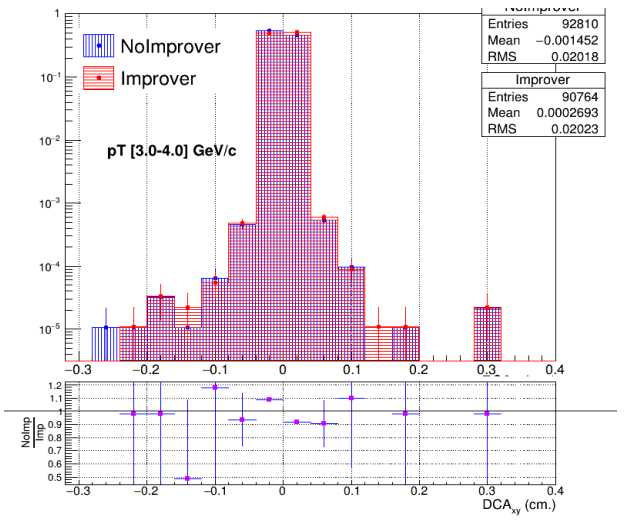


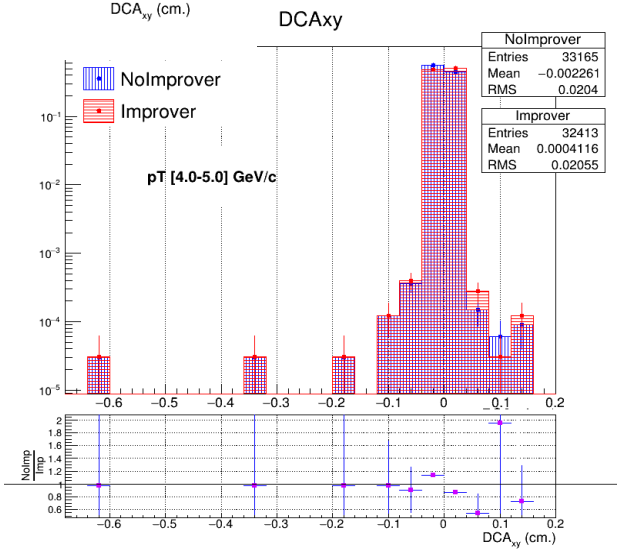


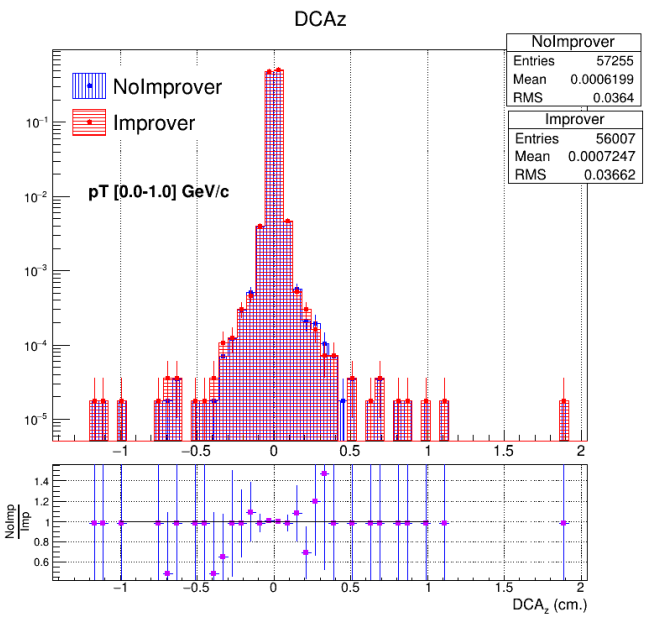


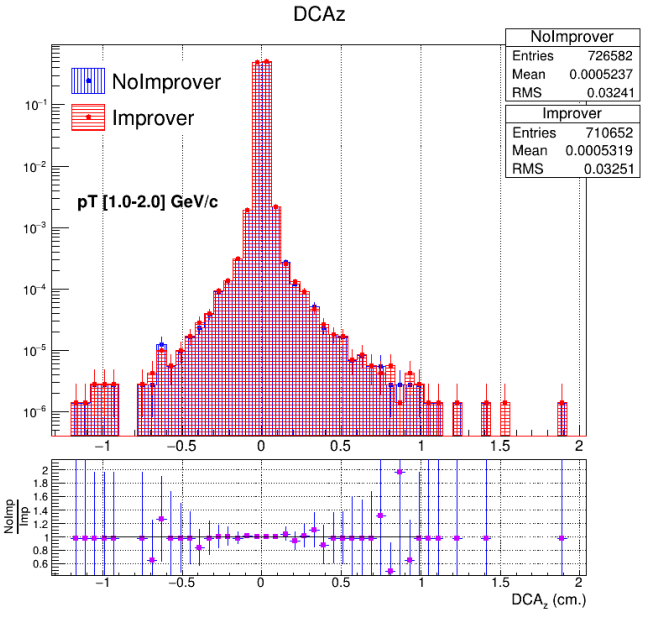


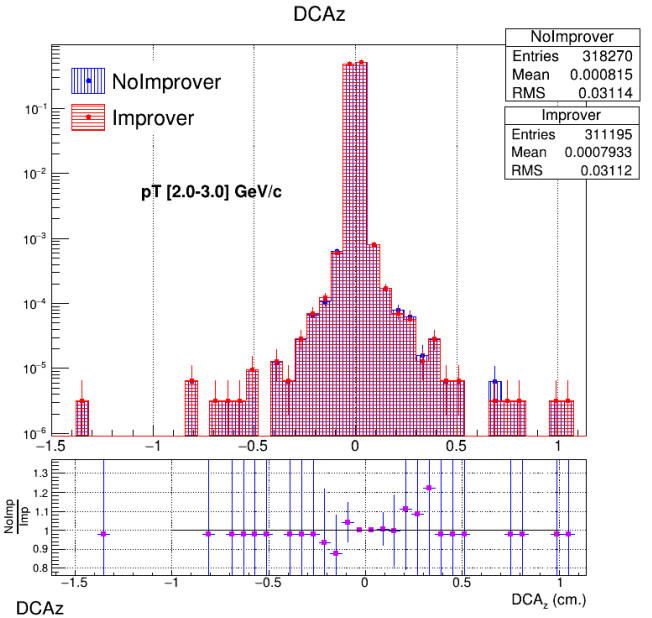
True-electron Prompt J/psi











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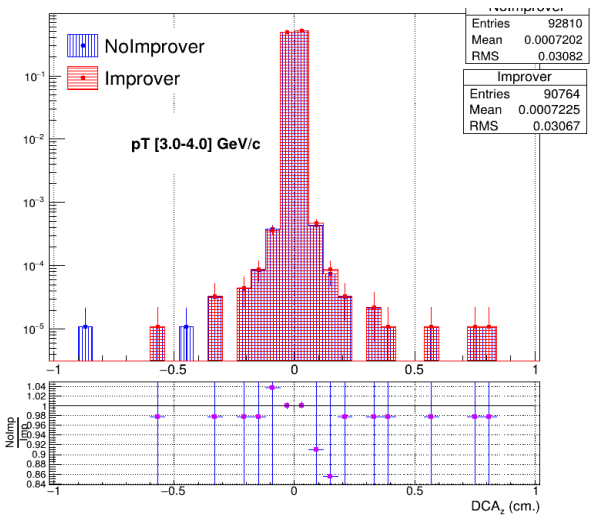
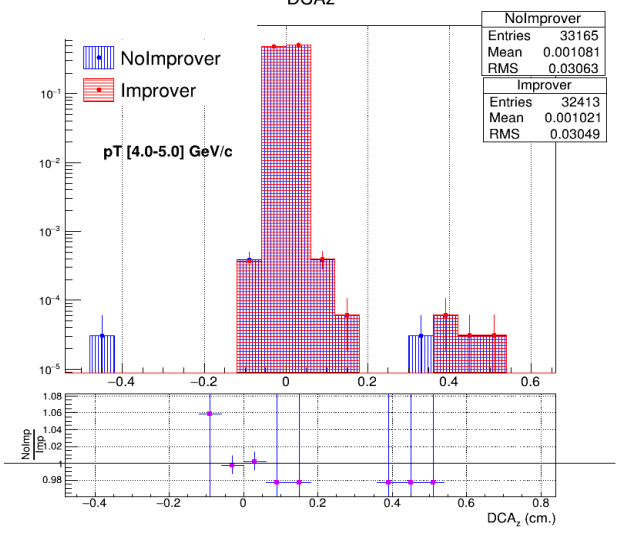
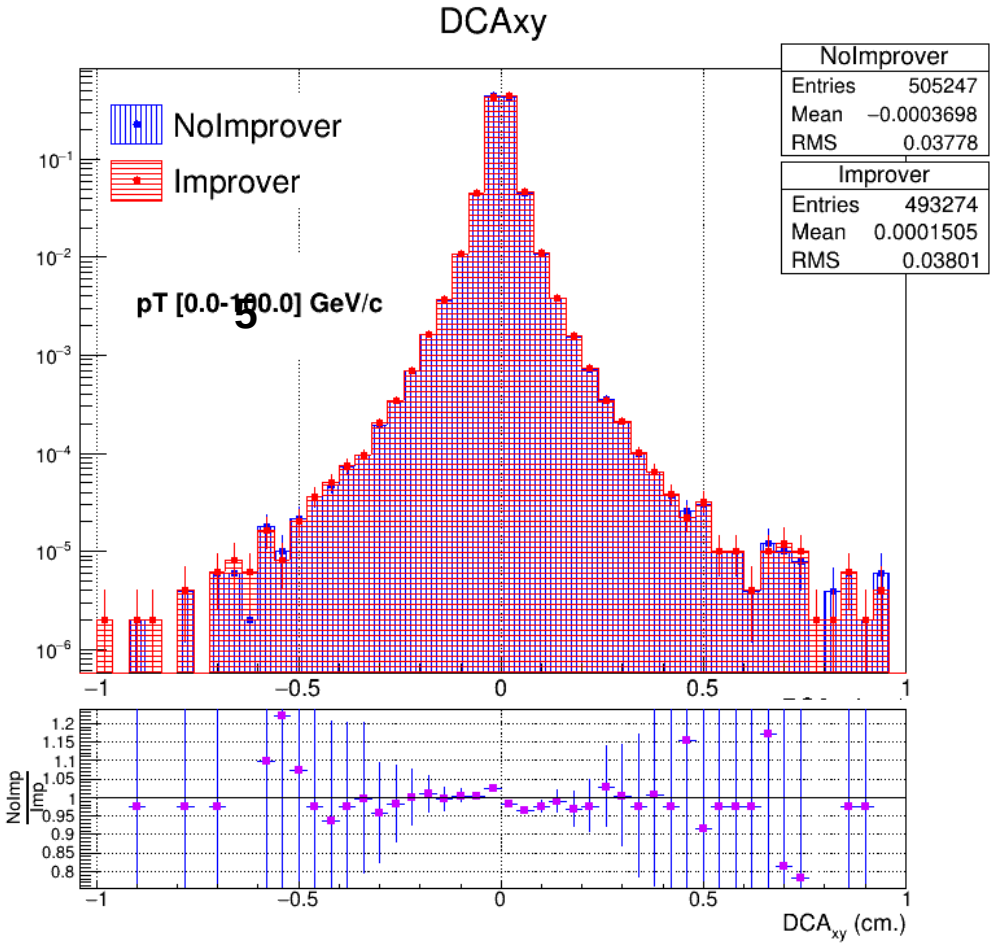
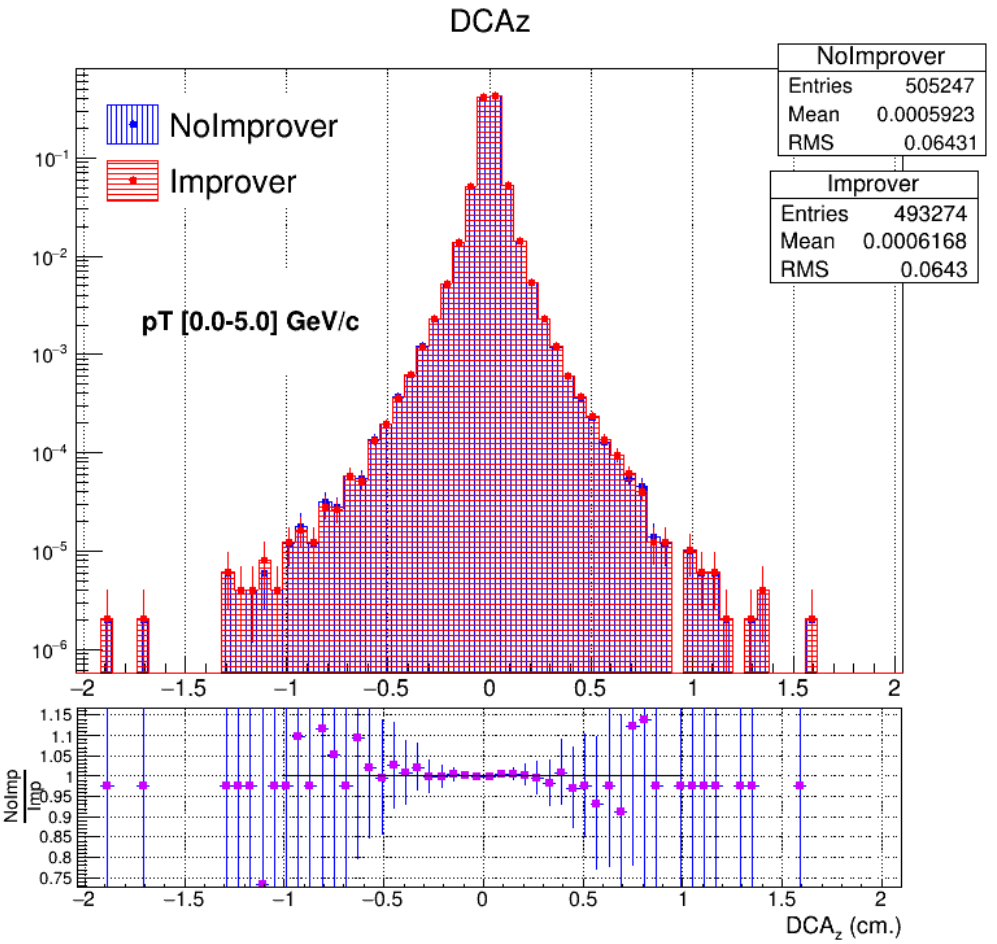
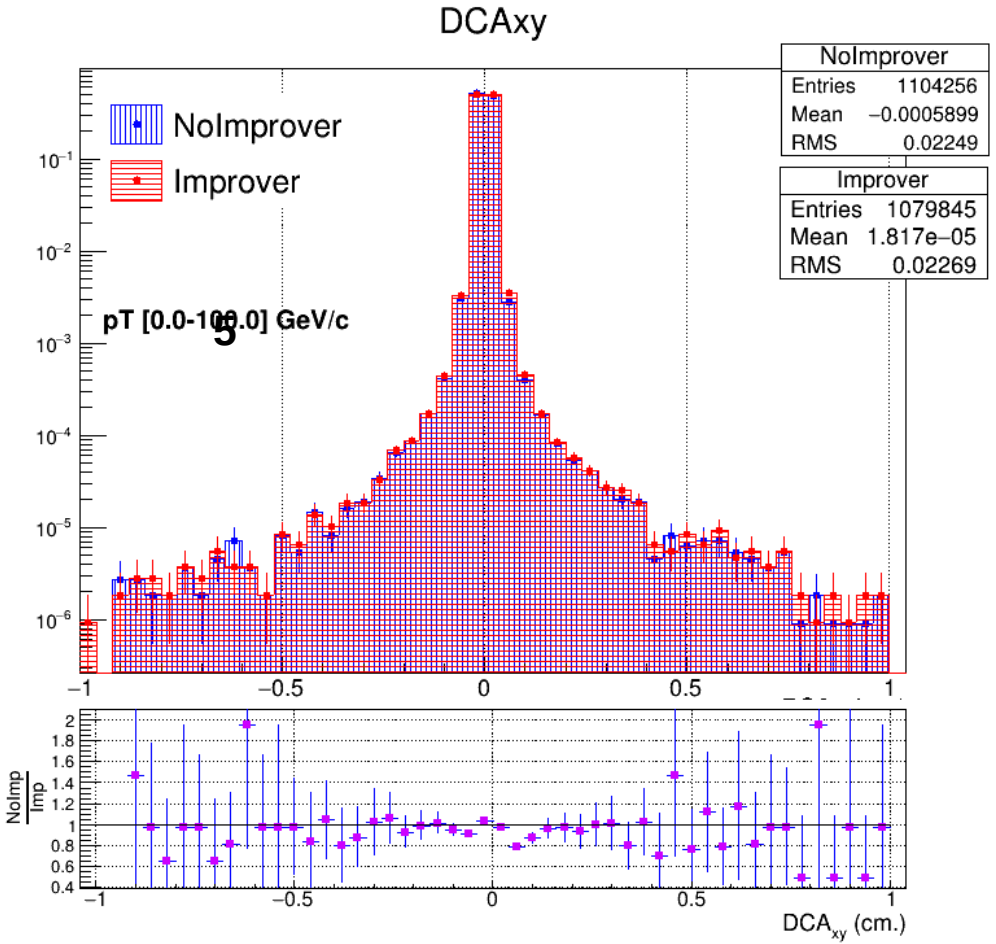


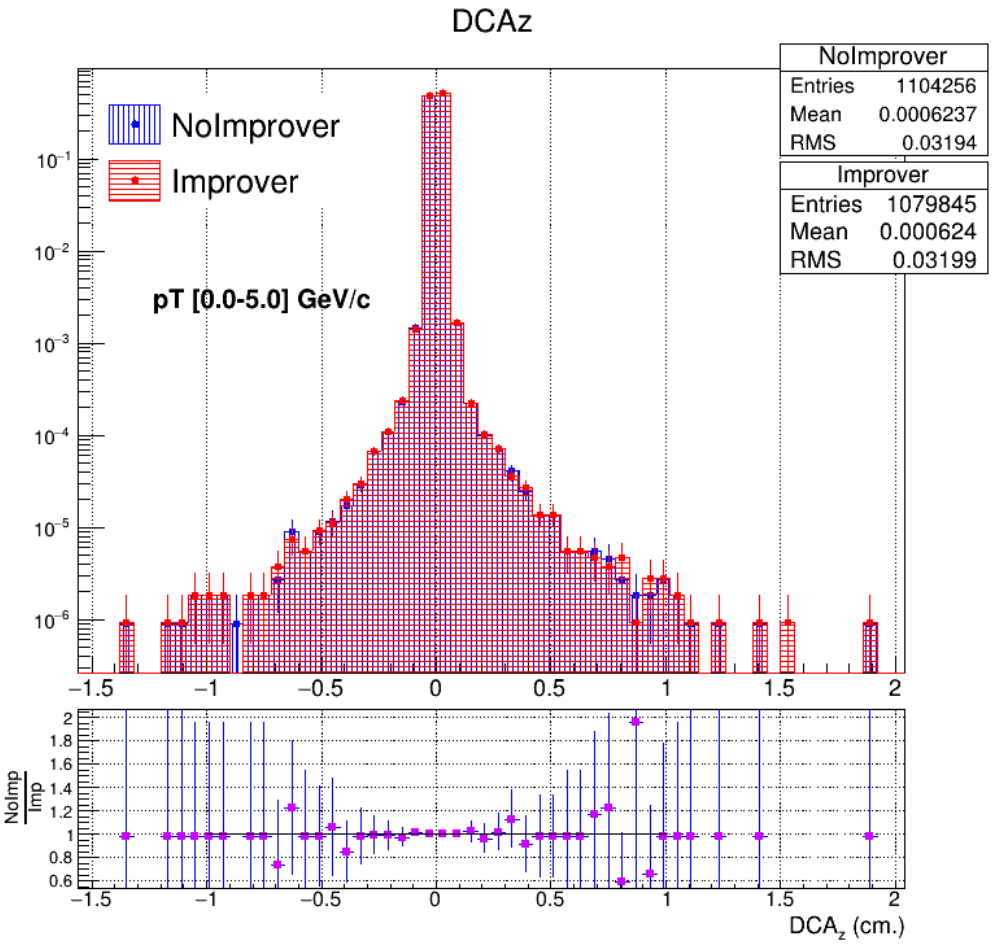






True-Electron Nonprompt





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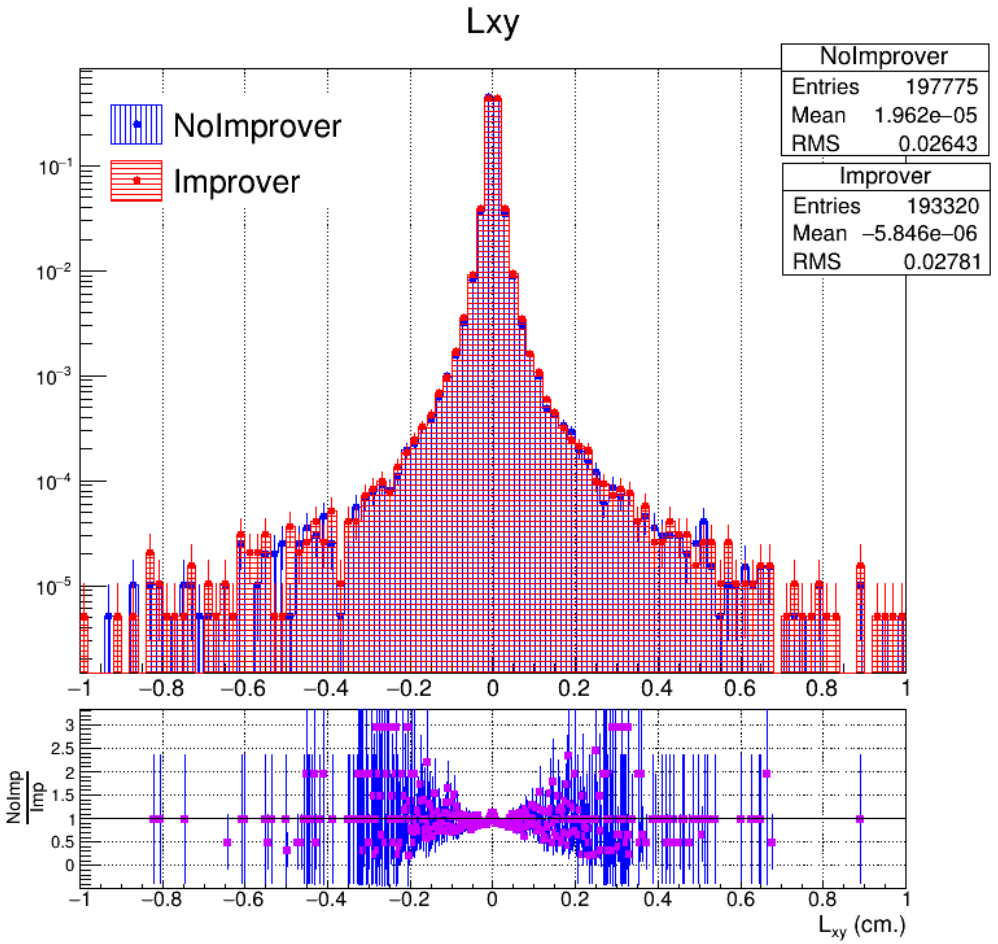

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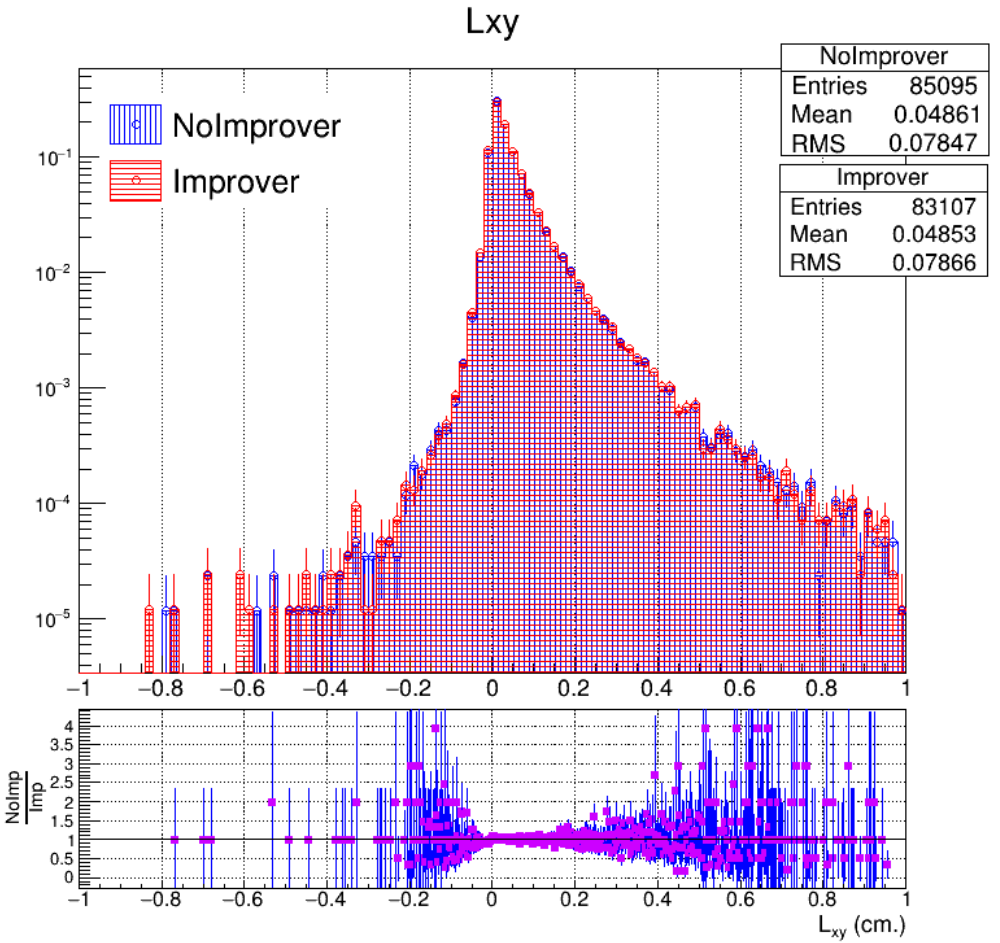

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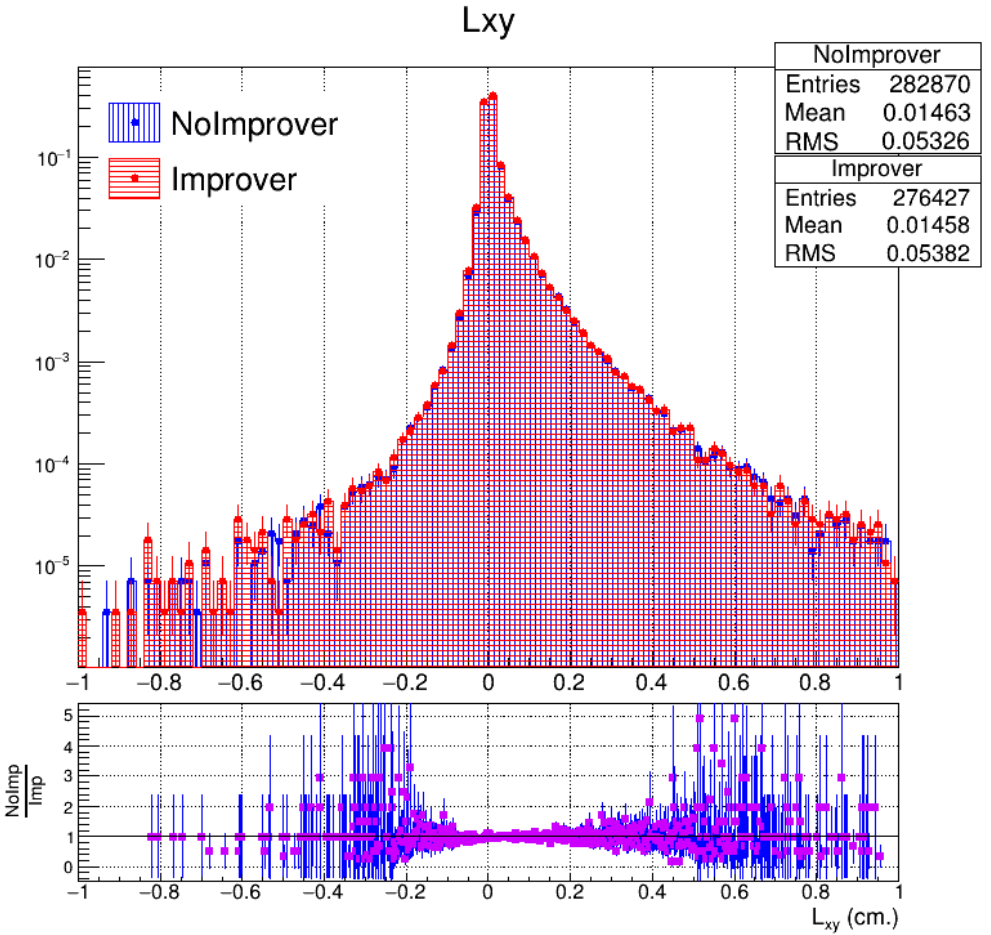

True-Electron from Jpsi
(Combined from Slide 11)

Back-Up

```
Cuts Used
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    - StandardCut
        - BasicCut
            - standardPrimary
                - DCAxy
                - DCAz
            - rejectKinks
            - standardITStracking
                - ITS refit
                - SPD any
                - chi2 (0,36)

            - standardTPCtracking
                - TPCnCls(70.,160.0)
                - kTPCnclsSharedRatio, 0.3, 2 (Exclude this region)
                - kTPCcrossedRowsOverFindableClusters, 0.8, 2.
                - kTPCchi2, 0.1, 4.0
        - StandardKine
            - Pt (1,30)
            - Eta (-0.9,0.9)                -
    - Pair Prefilter ====> (kMass, 0.0, 0.05, kTRUE) Mass Exclusion Cut
    - Track Prefilter ====> (kPt, 0.9,1000.0) && SetTrackFilterBit(kPrefilterCut)
    - PairKine ===>
                pairKine->AddCut(AliReducedVarManager::kPt, 0.0,100.0);
                pairKine->AddCut(AliReducedVarManager::kRap, -0.9,0.9);
                pairKine->AddCut(AliReducedVarManager::kMass, 2.0, 4.0);
```