

不同 η 区间利用v0 selection 挑选出的纯电子在before & after PID selection的表现

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➤ Data

➤ LHC17pq FAST pass2 (pp@5.02TeV)

➤ Runlist: 282367, 282366, 282365, 282343,
282342, 282341, 282340, 282314, 282313,
282312, 282309, 282307, 282306, 282305,
282304, 282303, 282302, 282247, 282230,
282229, 282227, 282224, 282206, 282189,
282147, 282146, 282127, 282126, 282125,
282122, 282120, 282119, 282118, 282099,
282098, 282078, 282051, 282050, 282031,
282025, 282021, 282016, 282008.

- 同一组data, 但有些task crash了, 导致事例数不同。
- Before PID selection用的事例数为 384M
- After PID selection用的事例数为582M

➤ Event selection:

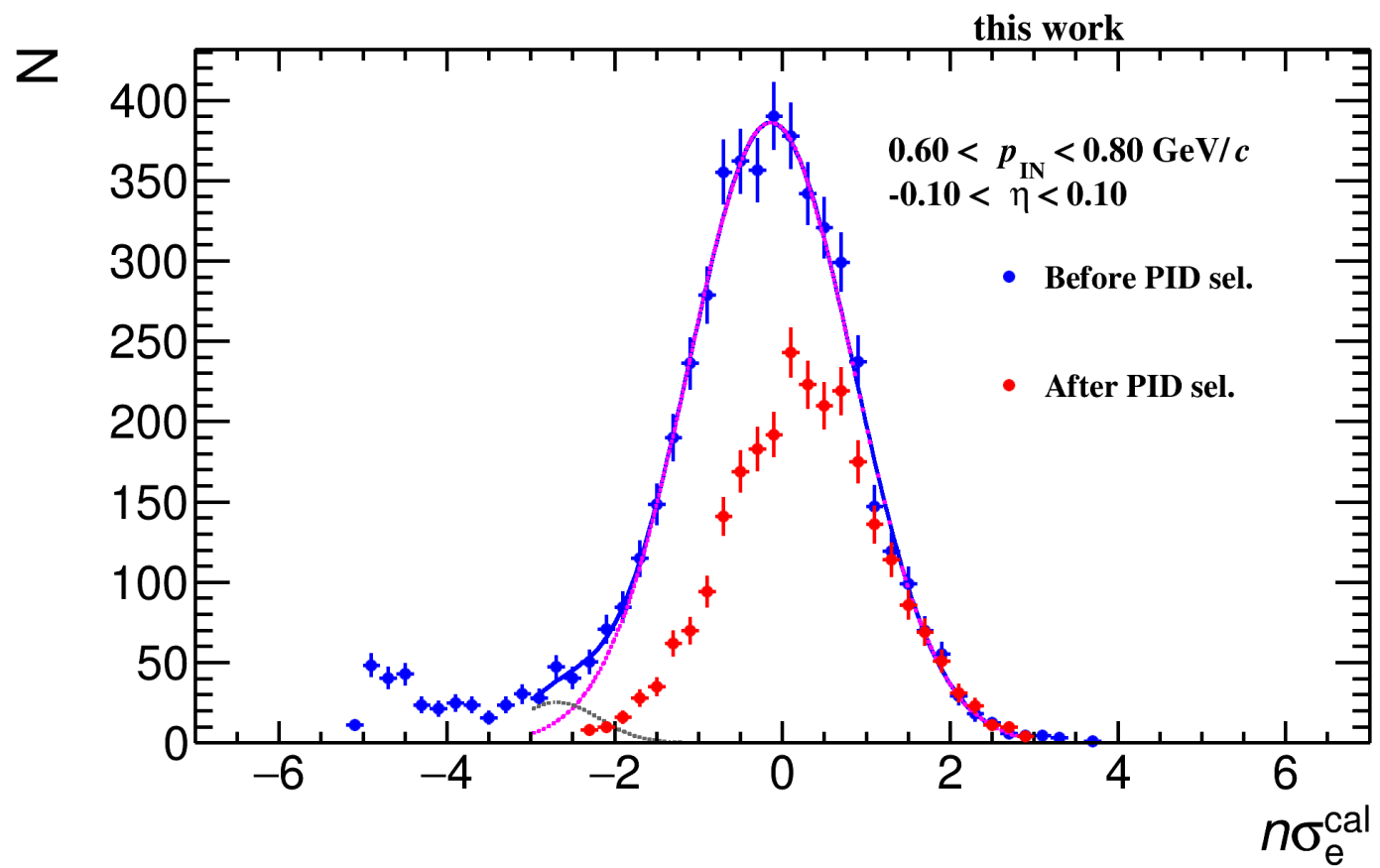
- INT7
- $-10 \text{ cm} < \text{VtxZ} < 10 \text{ cm}$

➤ Analysis cuts:

- $p_T > 1 \text{ GeV}/c$
- $|\eta| < 0.9$
- $\text{TPCncls} > 100$
- $0 < \text{TPCchi2} < 4$
- IsTPCrefit
- IsSPDany
- IsITSrefit
- $\text{ITSchi2} < 36$
- $|\text{DCAxy}| < 1 \text{ cm}$
- $|\text{DCAz}| < 3 \text{ cm}$

➤ PID selection

- $|\text{TPCn}\sigma^{\text{electron}}| < 3$
- $\text{TPCn}\sigma^{\text{proton}} > 3$
- $\text{TPCn}\sigma^{\text{pion}} > 3$



➤ 所有图的 p_T 都是从0到10GeV。

