

CMS Preliminary

19.7 fb⁻¹ (8TeV)

$$0.0 \leq y_b < 1.0$$

$$2.0 \leq y^* < 3.0$$

Uncertainty

- PileUpPtBB
- PileUpPtHF
- PileUpDataMC
- PileUpPtEC1
- PileUpPtEC2
- PileUpPtRef

200

500

 $p_{T,avg}$ (GeV)