

19.71 fb<sup>-1</sup> (8 TeV)

Uncertainty

$$0 \leq y_b < 1$$
$$1 \leq y^* < 2$$

PileUpPtBB  
PileUpPtHF  
PileUpDataMC  
PileUpPtEC1  
PileUpPtEC2  
PileUpPtRef

1.10  
1.05  
1.00  
0.95  
0.90

200

300

500

1000

 $p_{T, \text{avg}} / \text{GeV}$ 