

Fake rate

 $\sqrt{s}=14$  TeV, HL-LHC

ITk Layout: 03-00-00

 $t\bar{t}$ ,  $\langle\mu\rangle = 200$ , Truth  $p_T > 1$  GeV

- Combinatorial Kalman Filter
- Metric Learning
- Module Map MeanRMS
- Module Map MeanMax

 $10^{-4}$  $10^{-5}$ 

2.2

1.8

1.6

1.4

1.2

1.0

0.8

0.6

0.4

0.2

0.0

 $\mu$ 