

# Vertex Resolution and Flavour tagging performance of the New CLIC Detector

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CLICdp New-Software Project-Meeting



## 1. ILCSoft 23-08-2017

## 2. CLIC\_o3\_v13

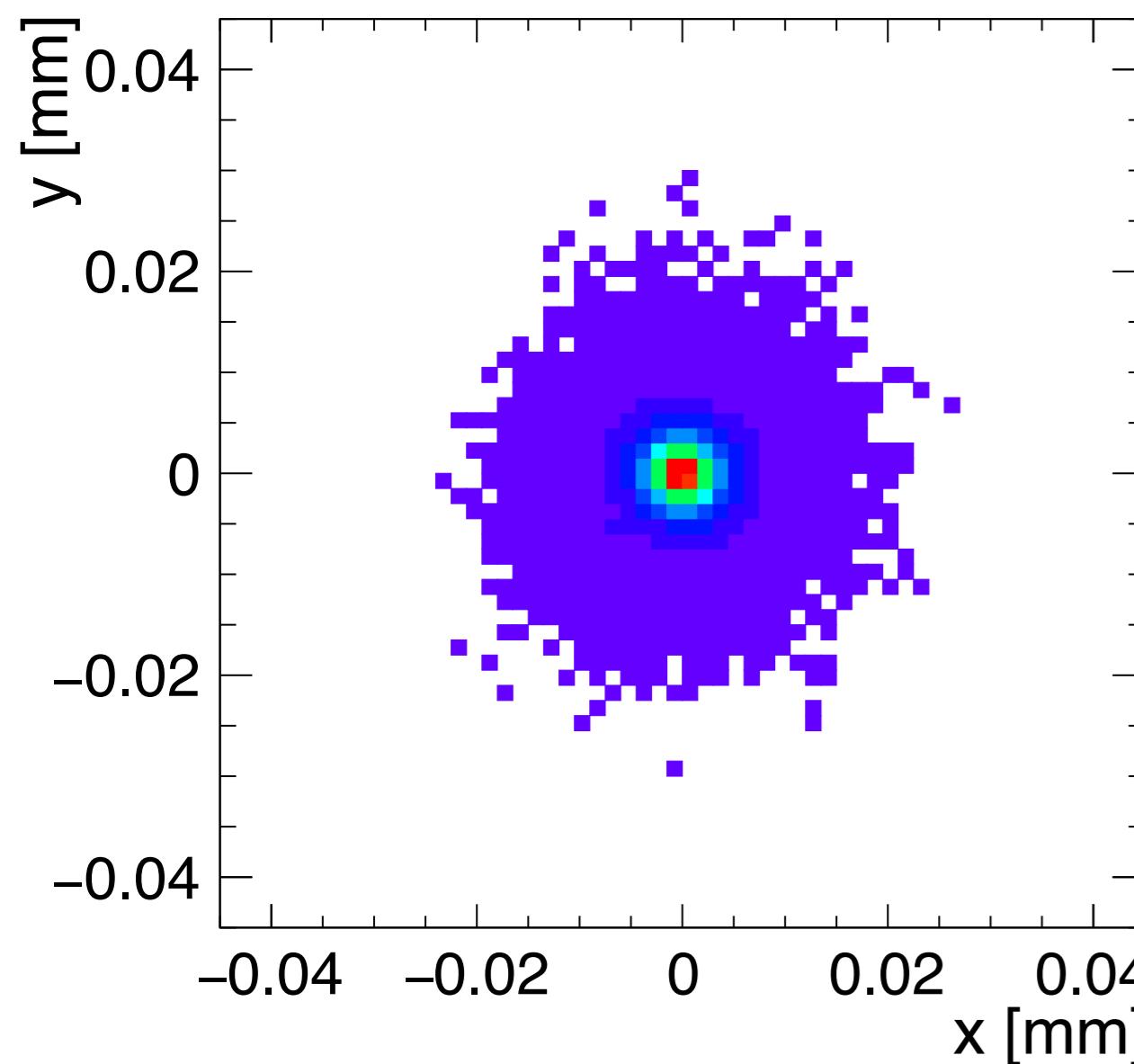
## 3. Dijet samples at 500 GeV (20°-90°)

- $e^+e^- \rightarrow bb$  (80.000 events)
- $e^+e^- \rightarrow cc$  (80.000 events)
- $e^+e^- \rightarrow qq$  ( $q = uds$ )(80.000 events)

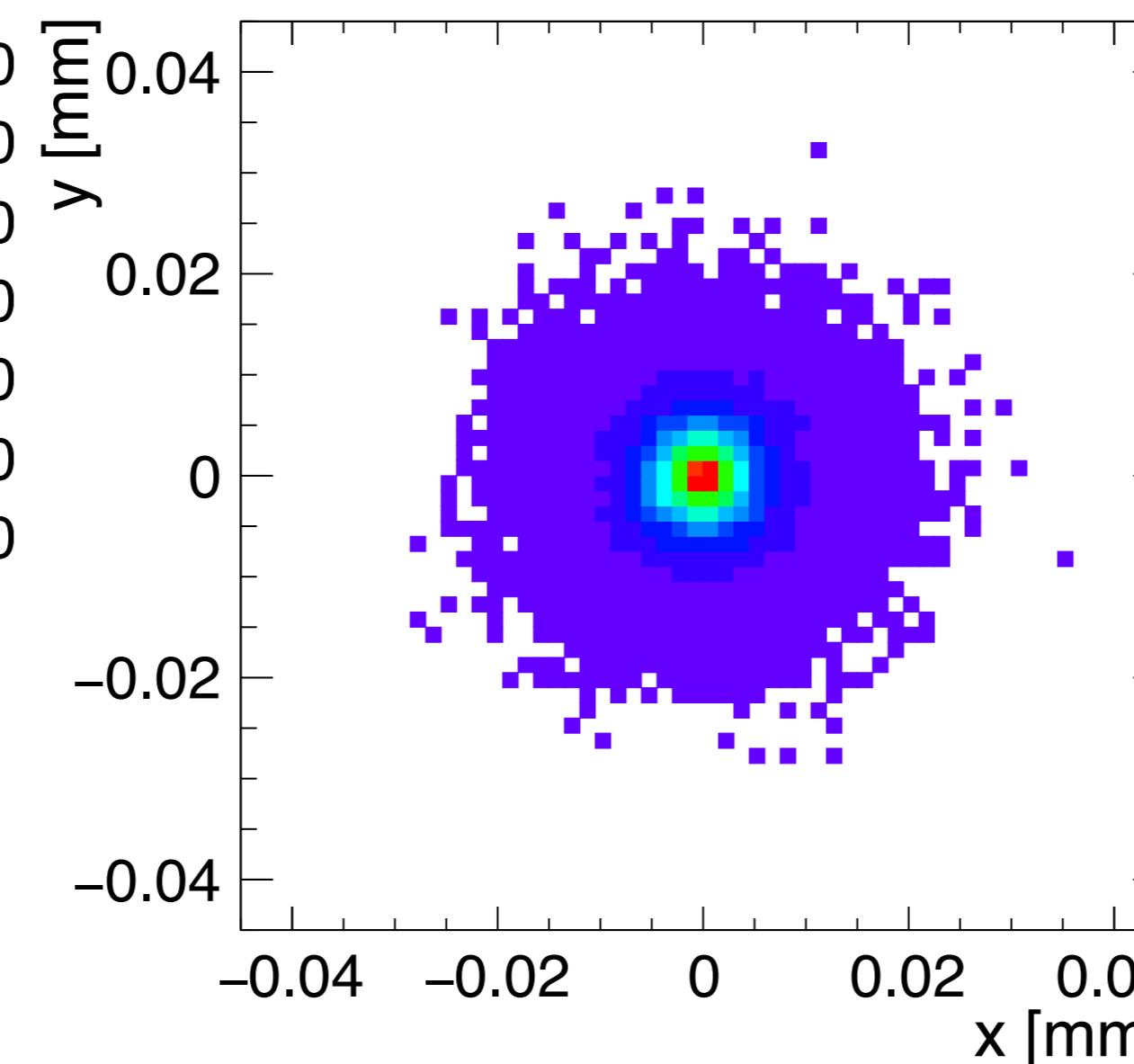
## 4. 0.3 $\gamma\gamma \rightarrow$ had. / BX

# Primary vertex resolution vs single point resolution

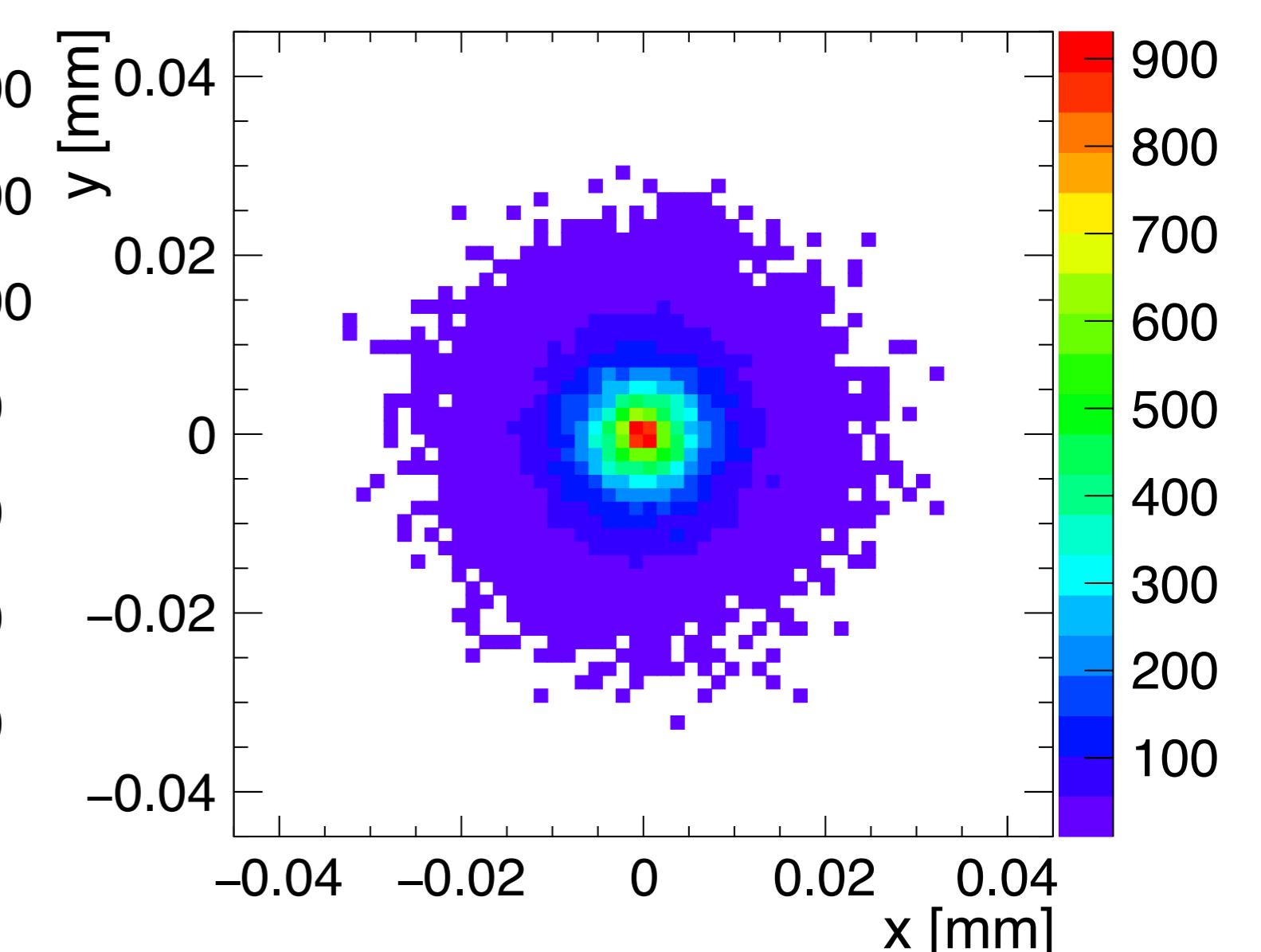
1 $\mu\text{m}$



3 $\mu\text{m}$

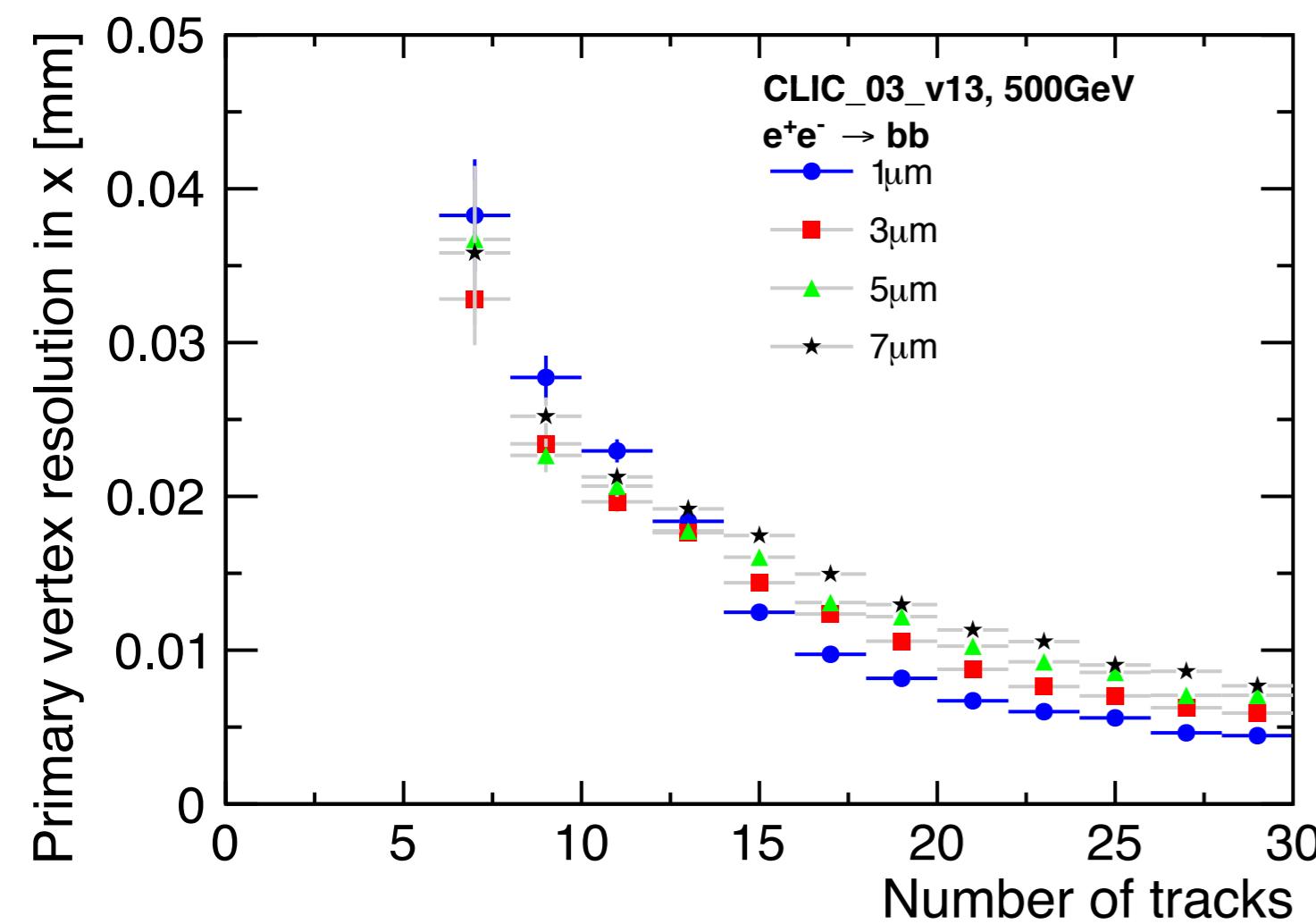


7 $\mu\text{m}$

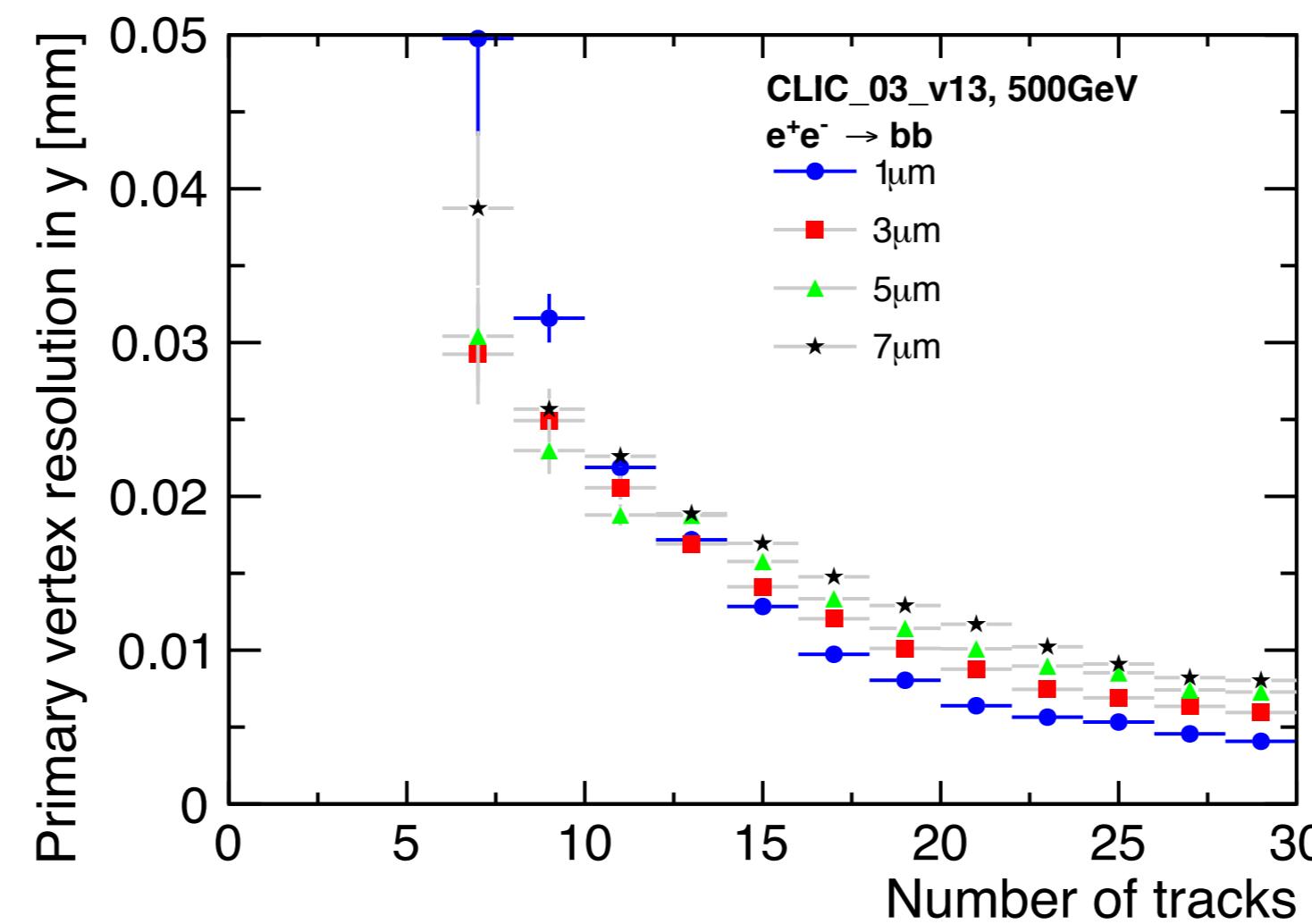


# Primary vertex resolution vs single point resolution

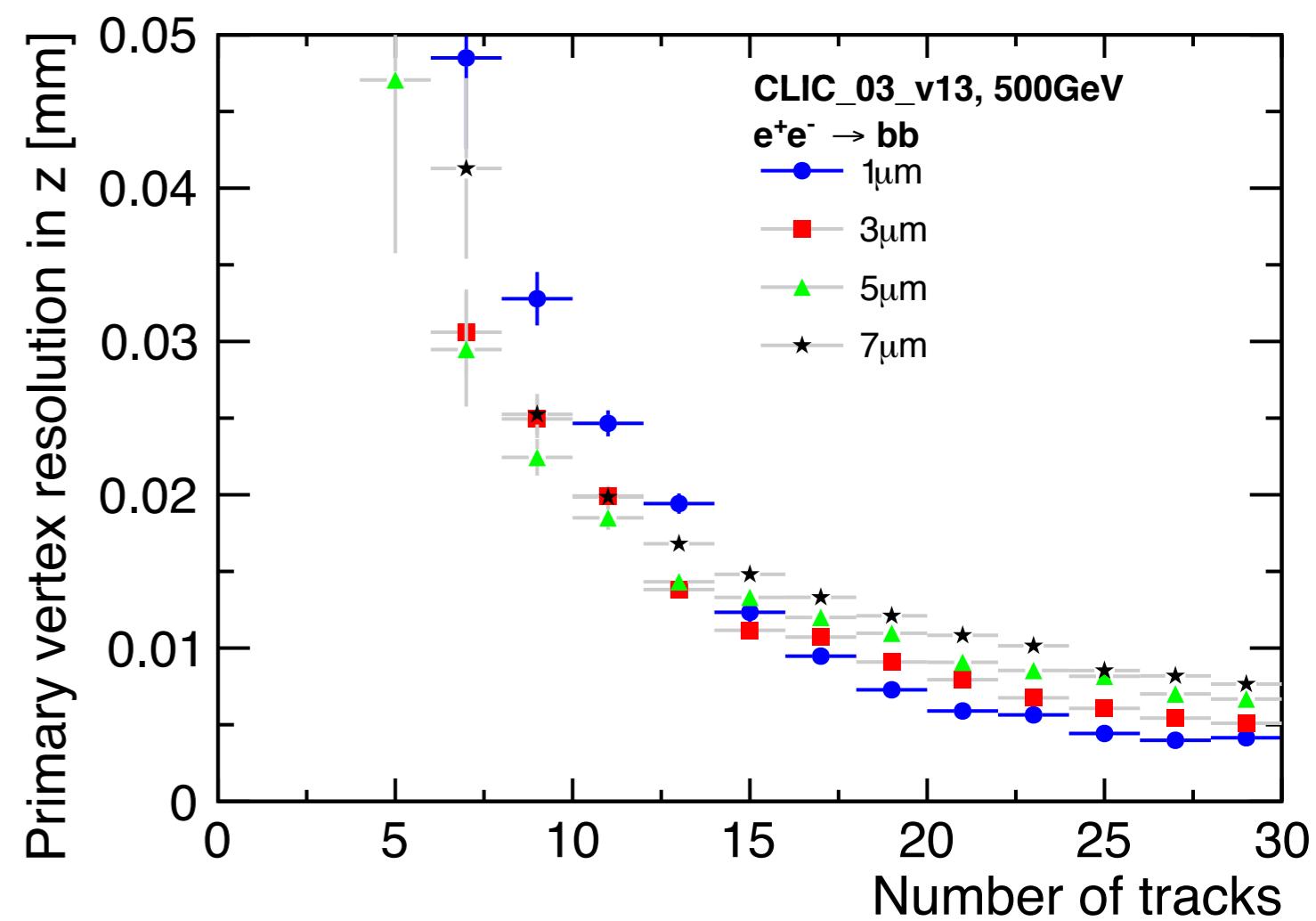
X



Y

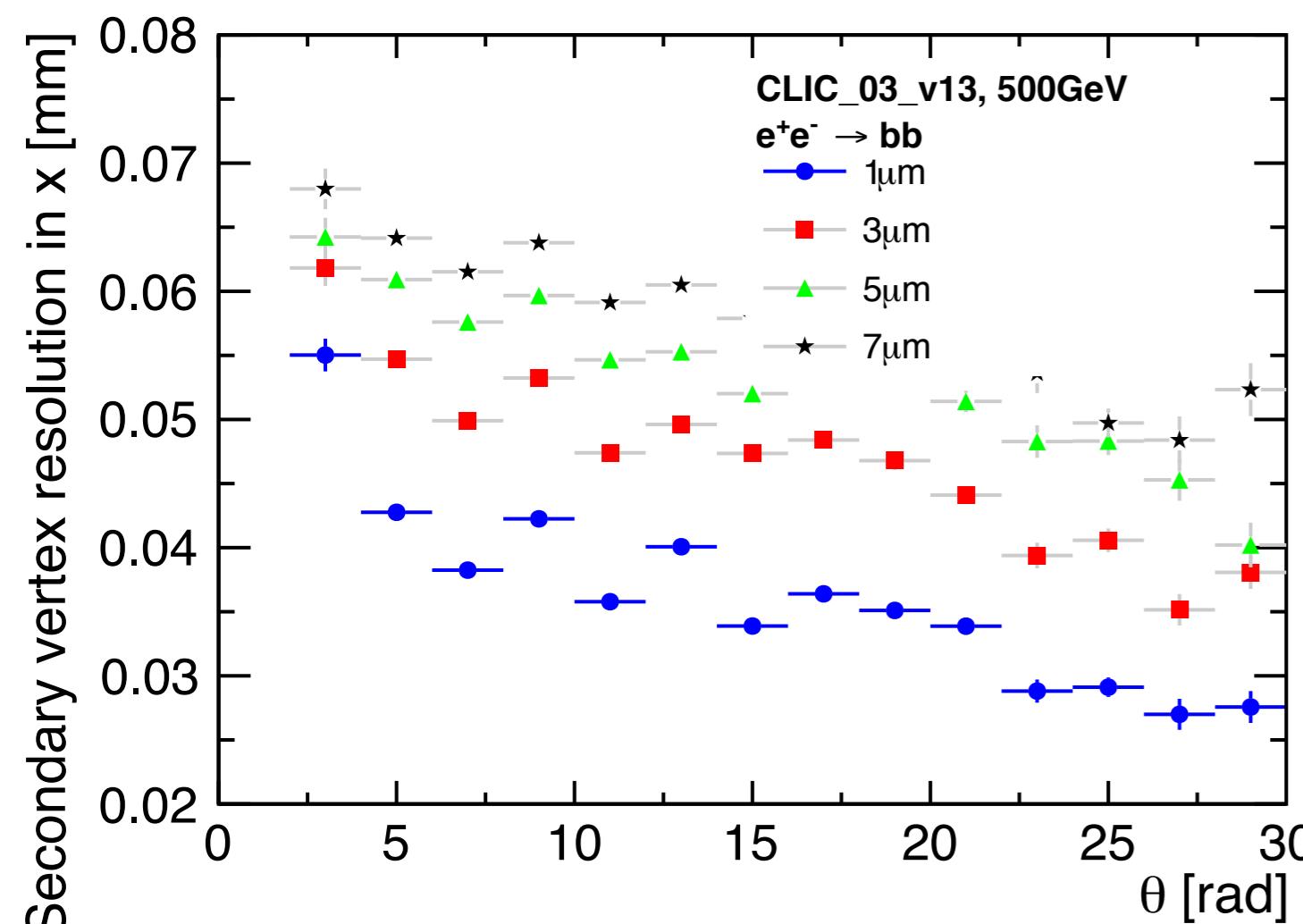


Z

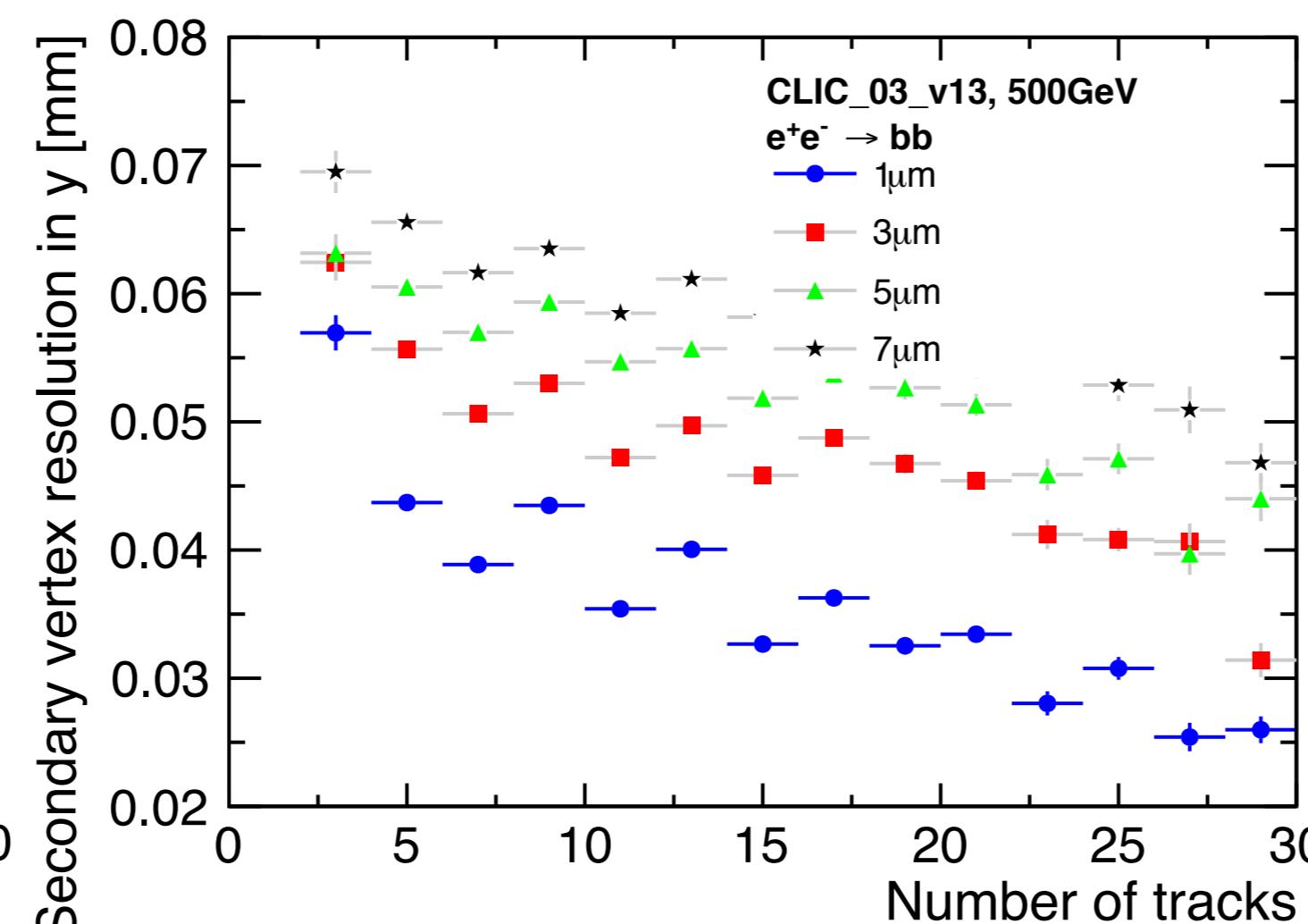


# Secondary vertex resolution vs single point resolution

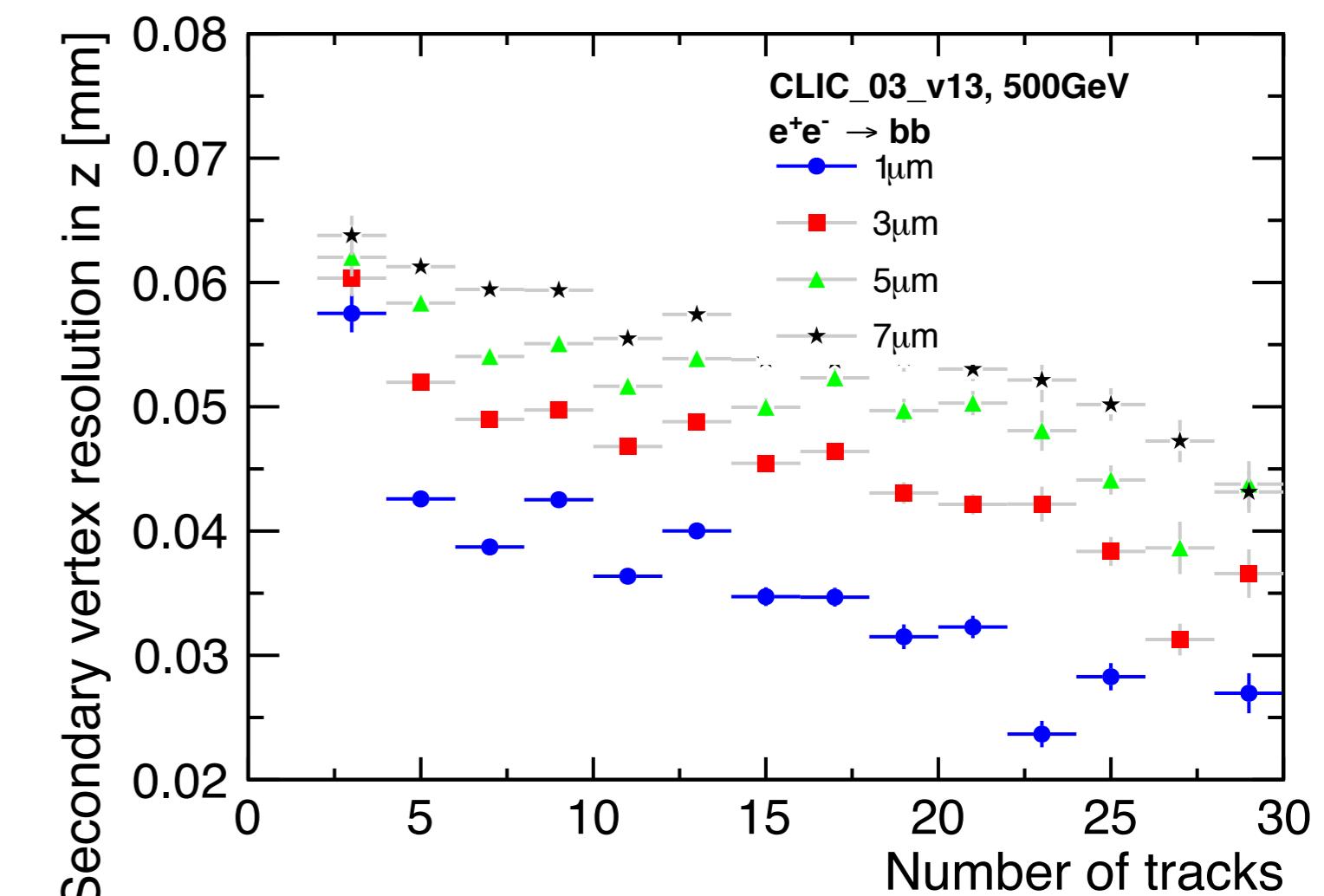
X



Y

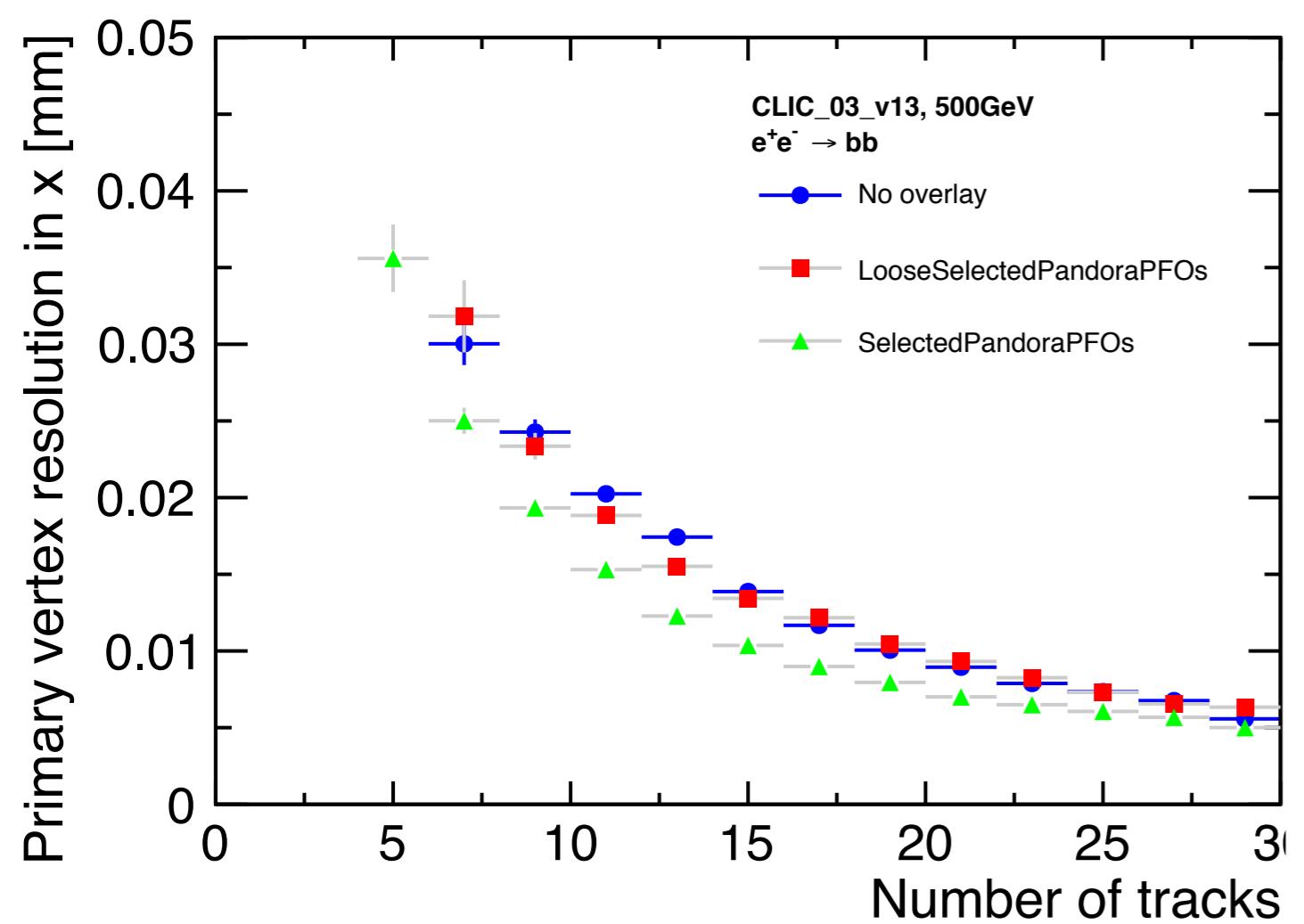


Z

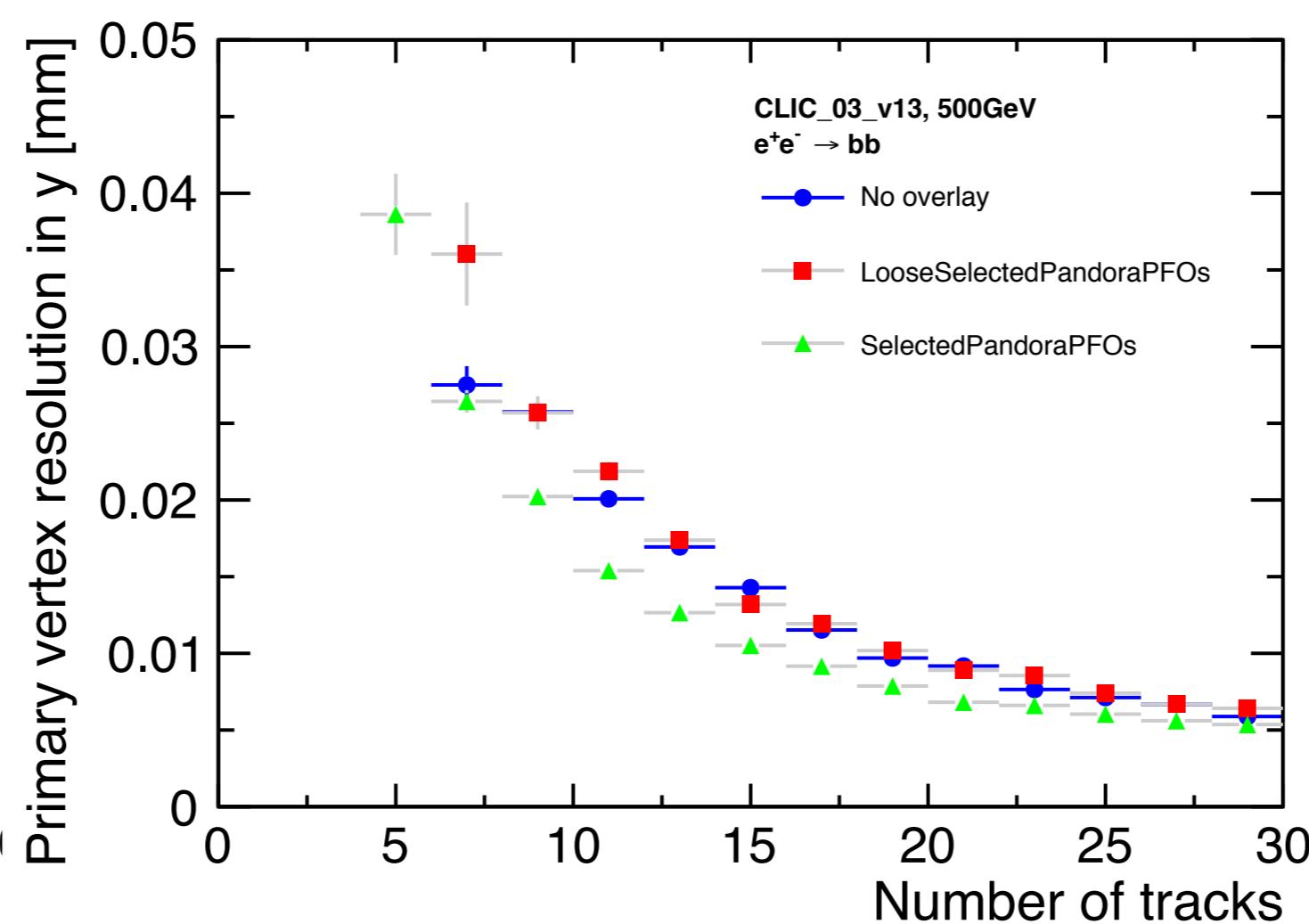


# Primary vertex resolution vs background

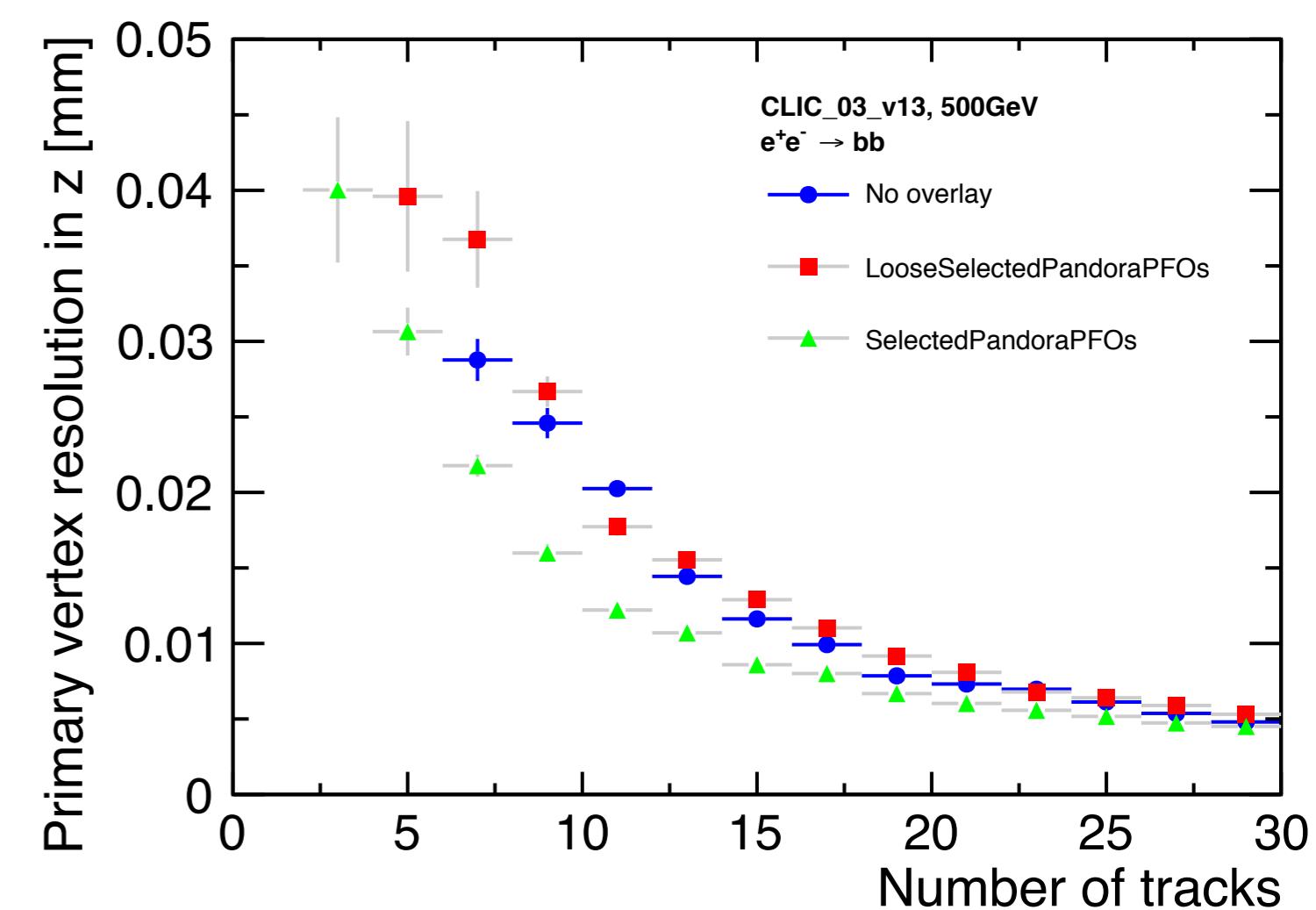
X



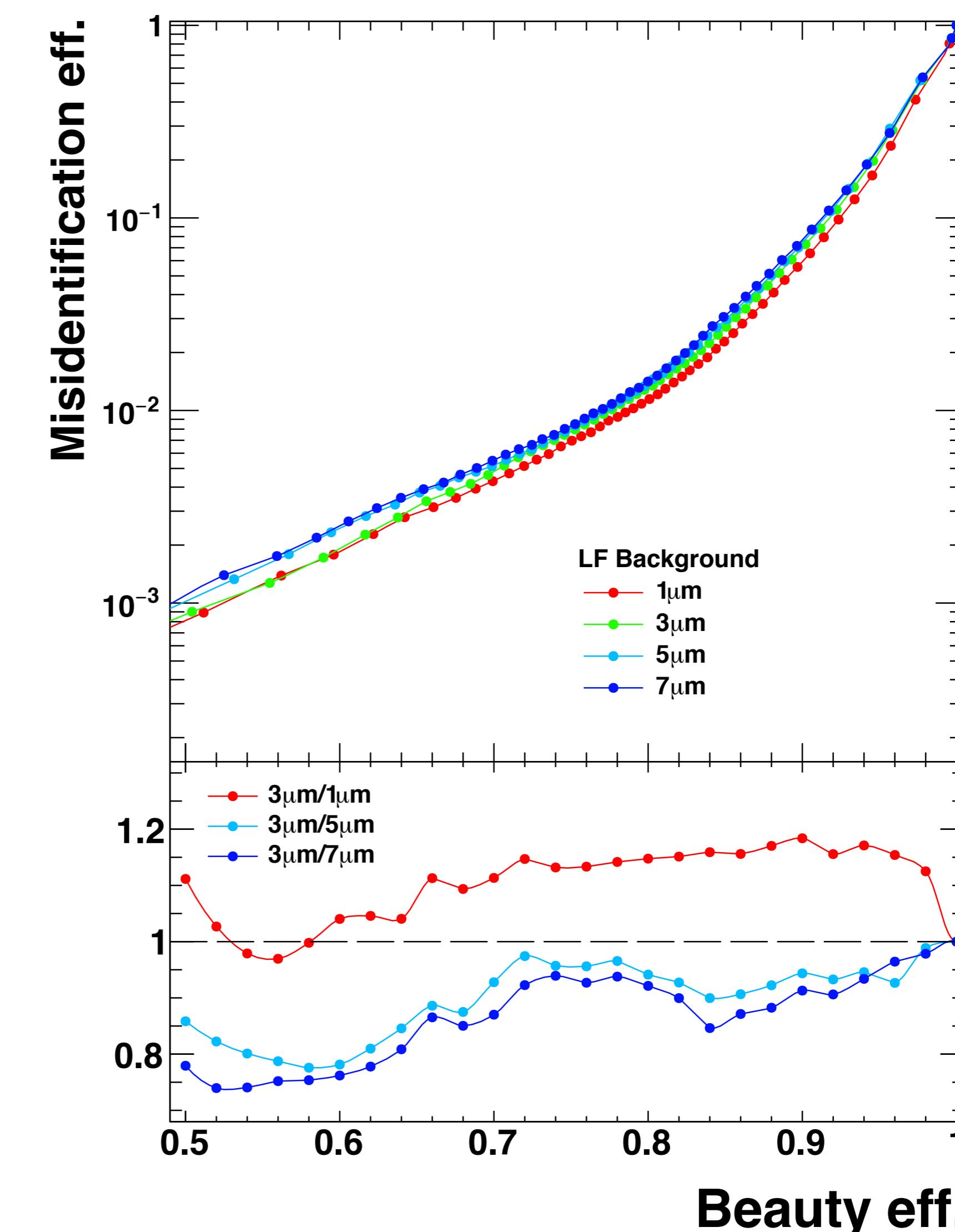
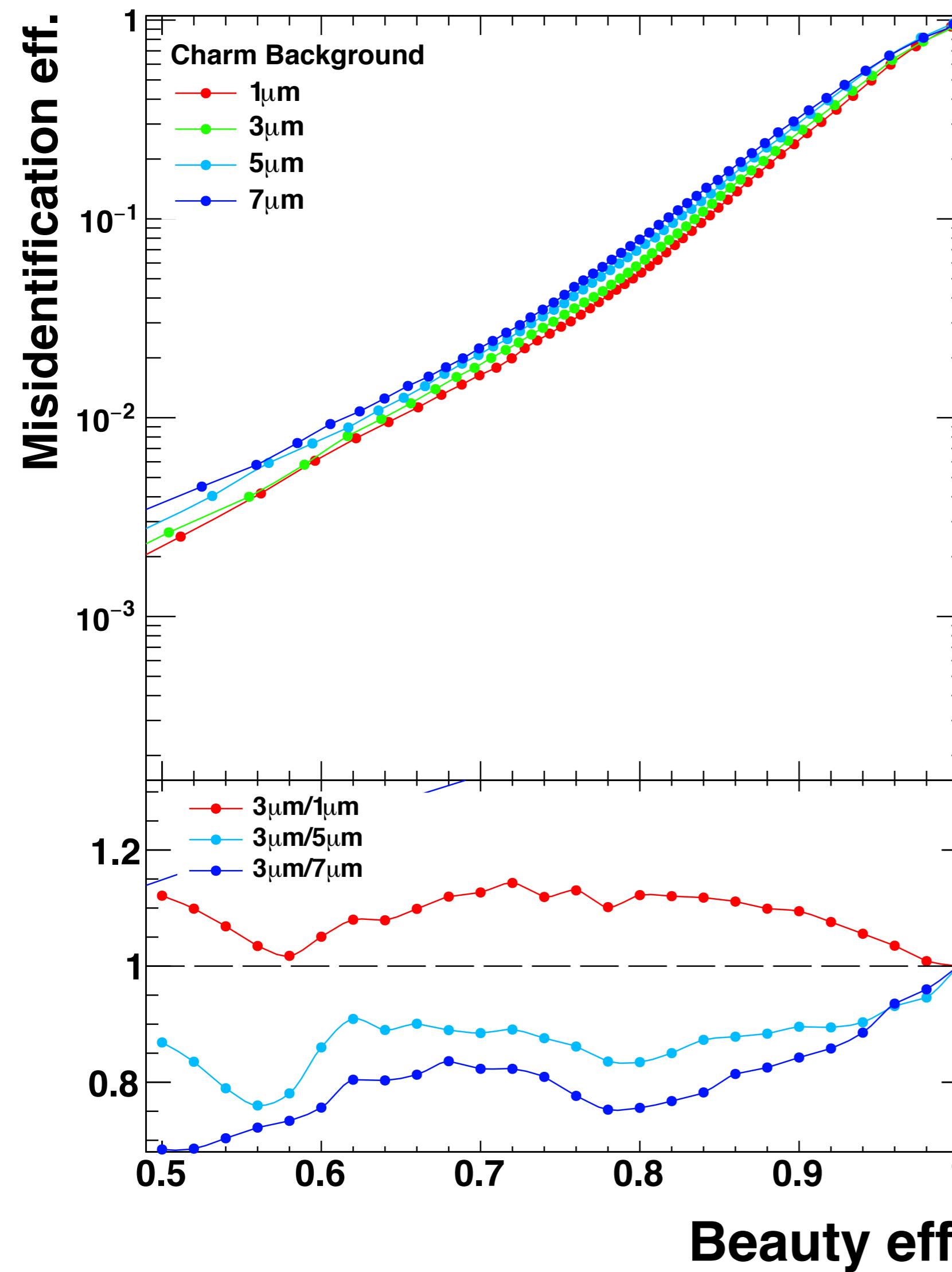
Y



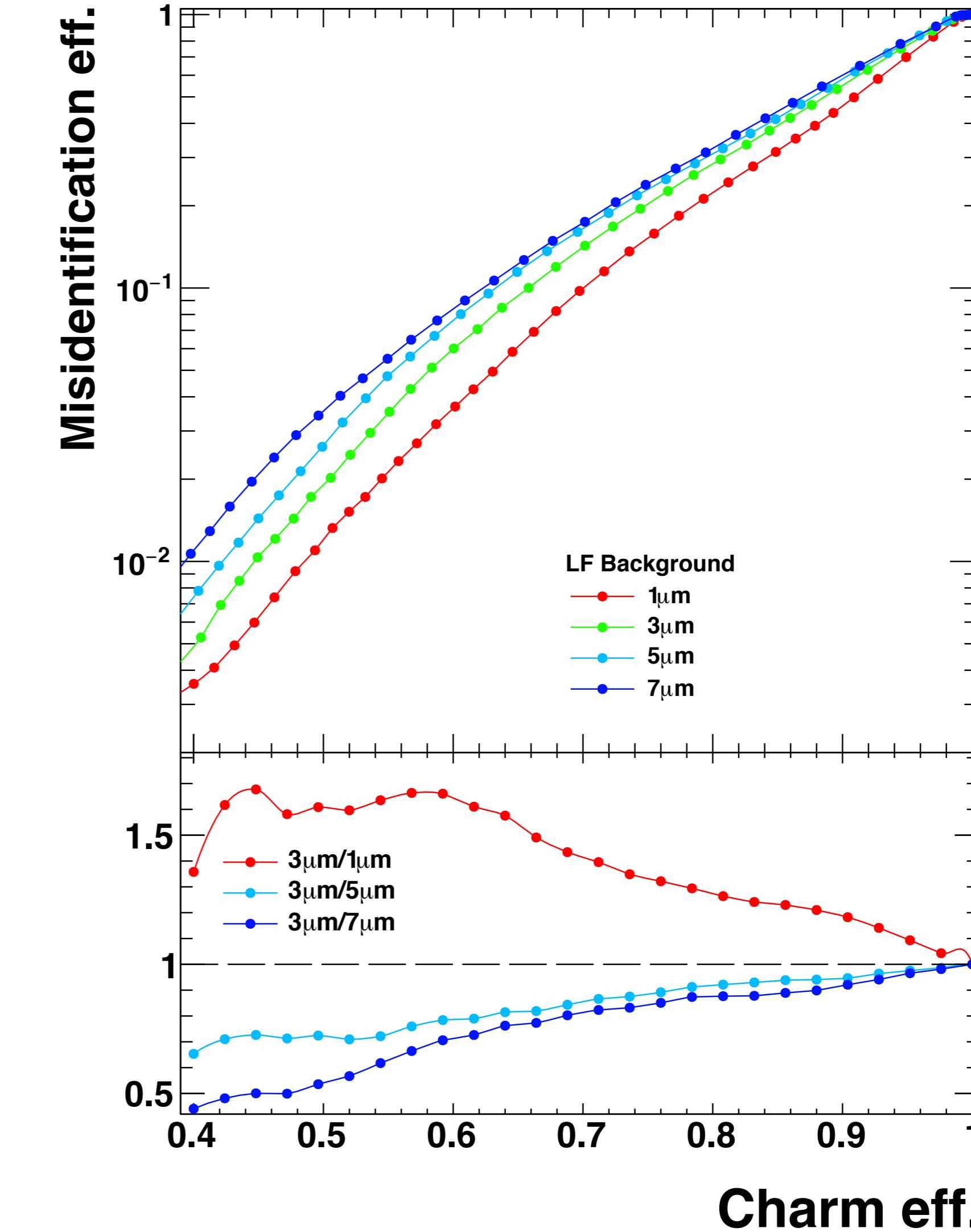
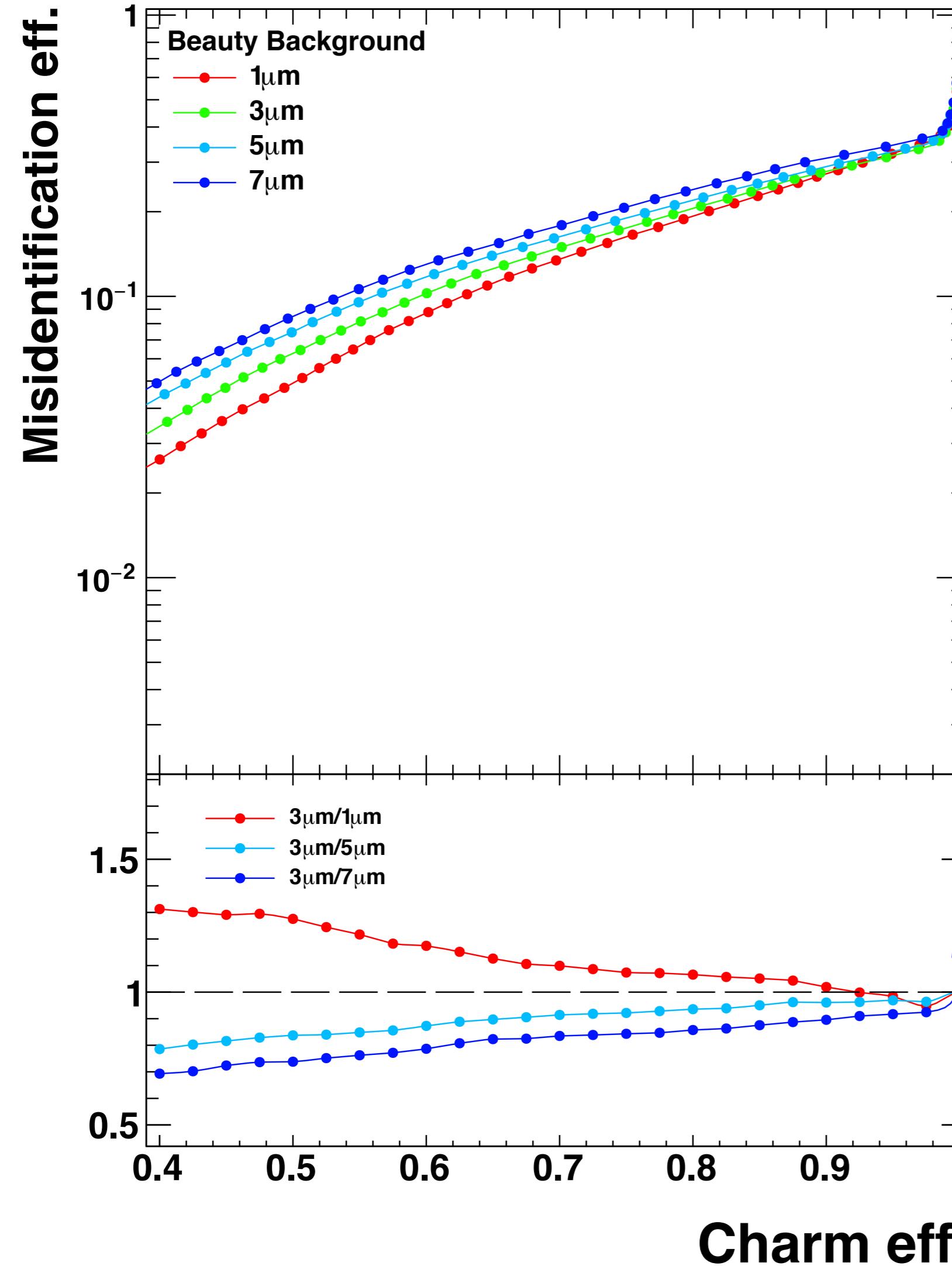
Z



# Flavour tagging performance vs single point resolution



# Flavour tagging performance vs single point resolution



# Flavour tagging performance (LCFIPlus vs FastJet)

