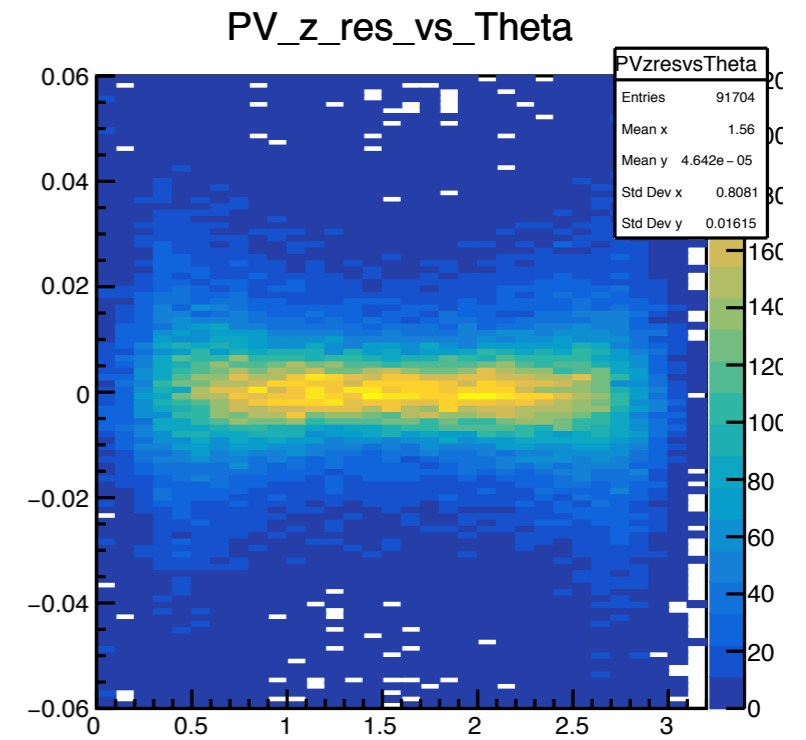
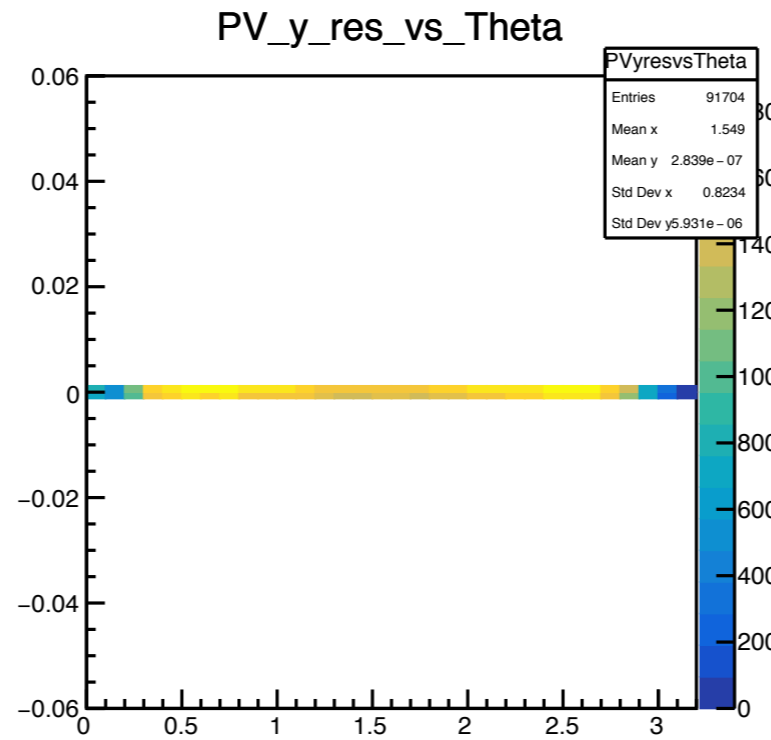
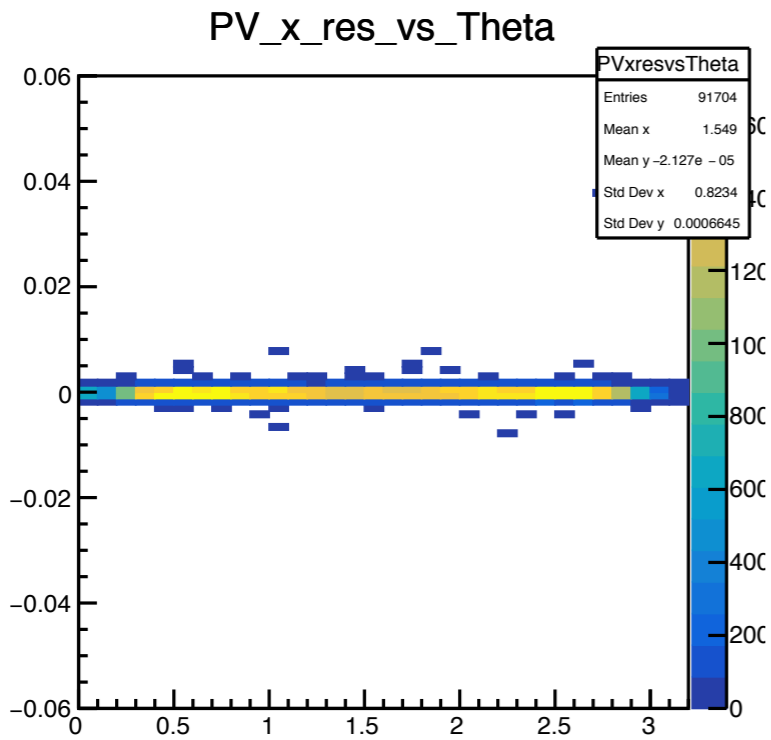
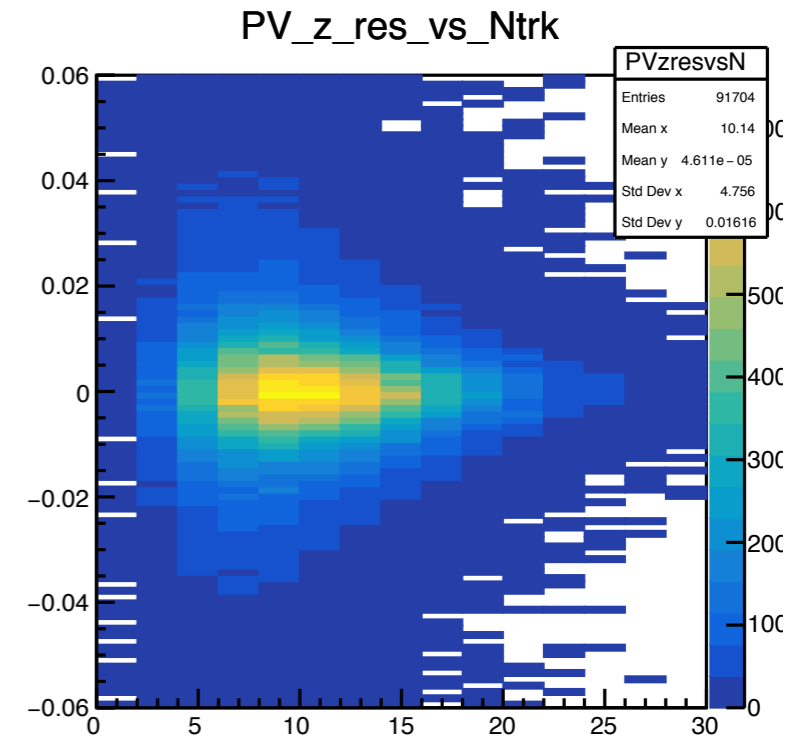
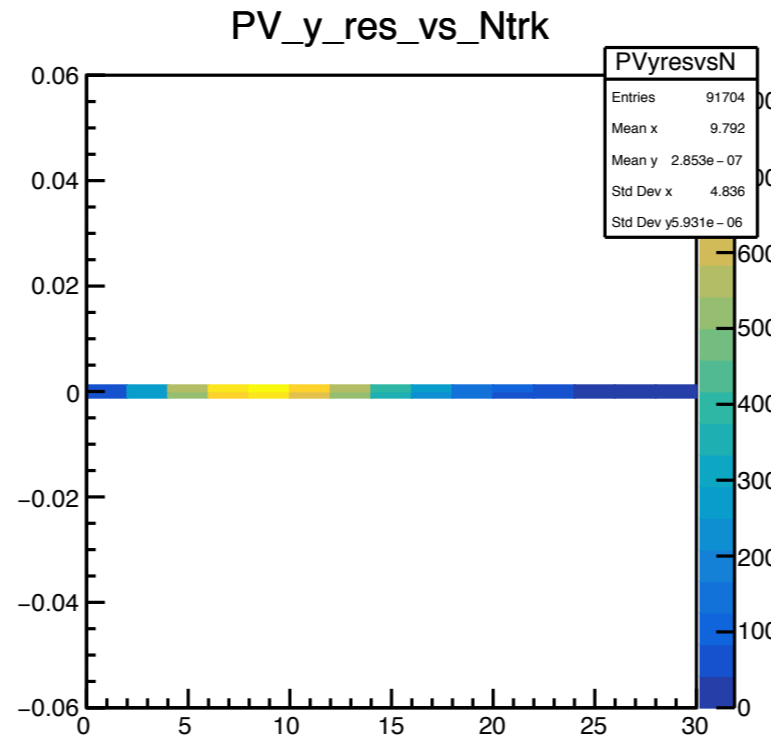
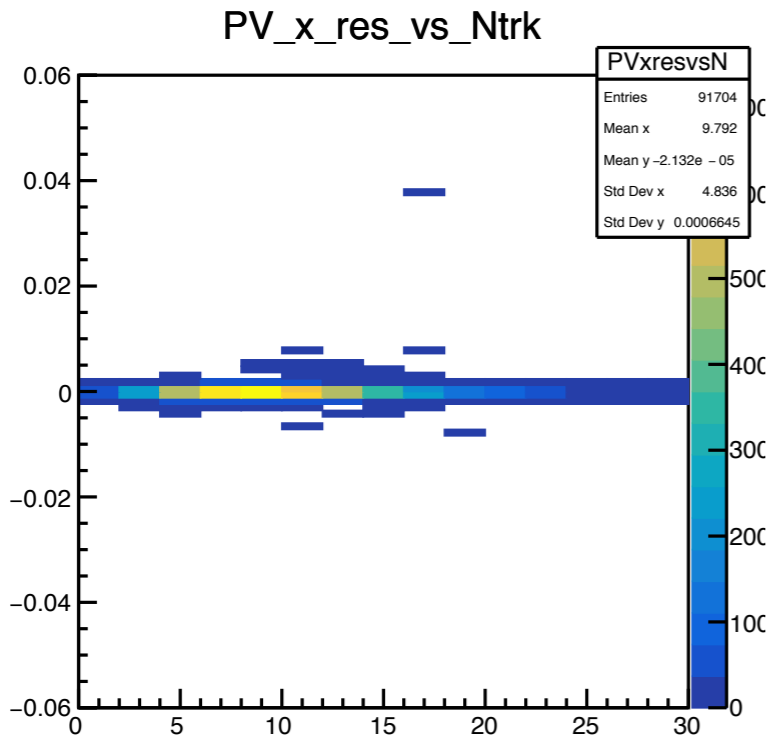


Vertex Resolution and Flavour tagging performance of the new CLIC detector model

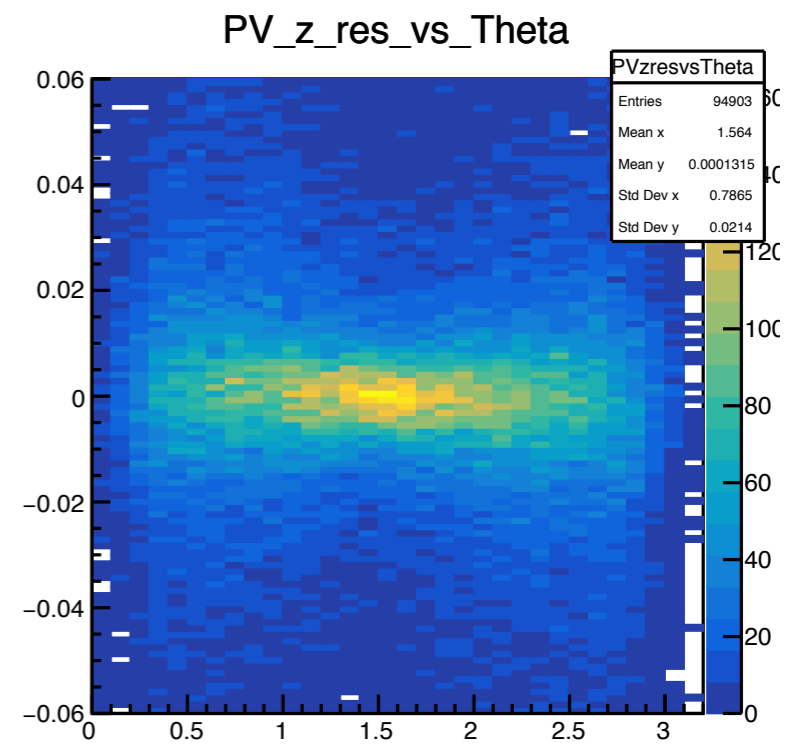
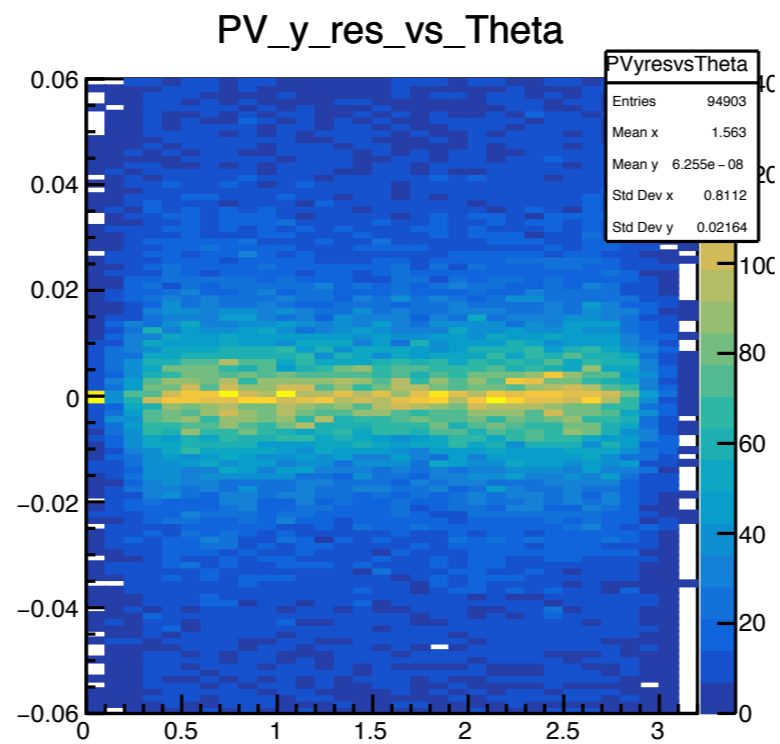
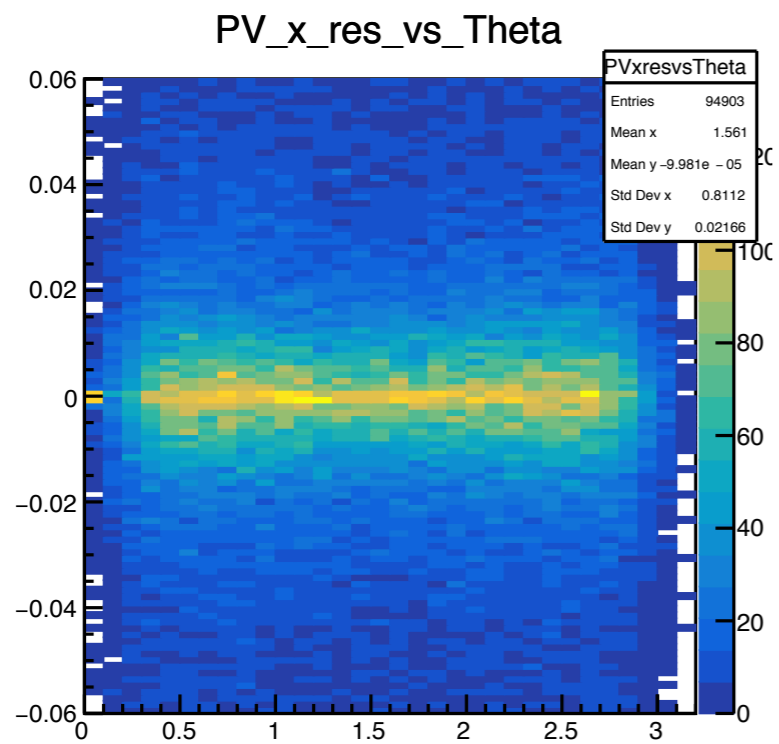
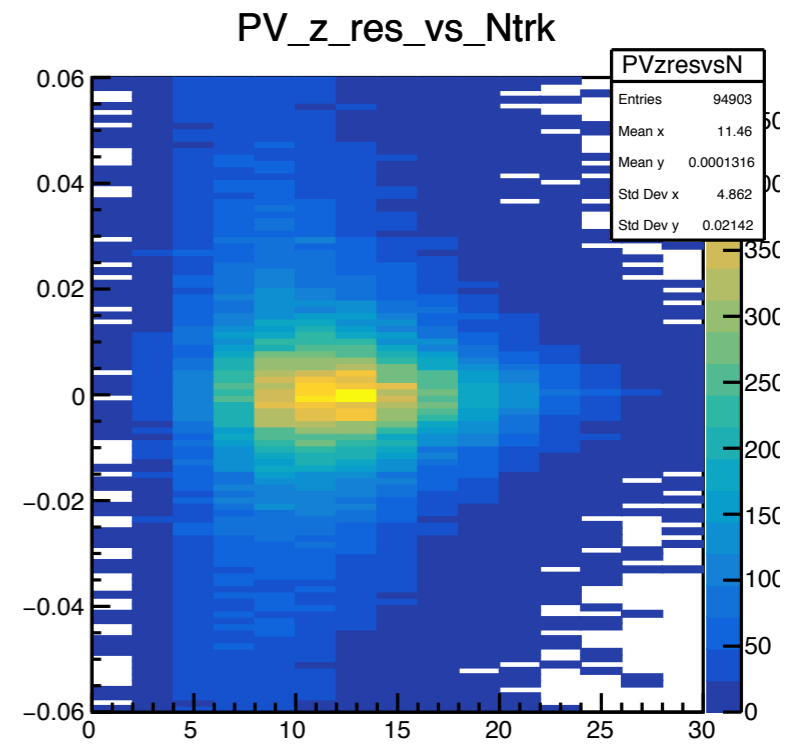
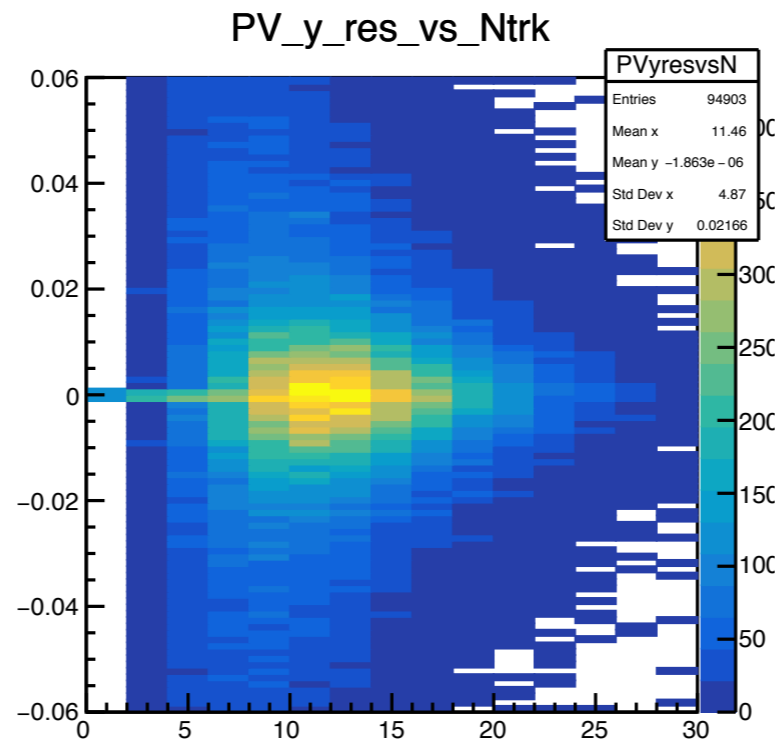
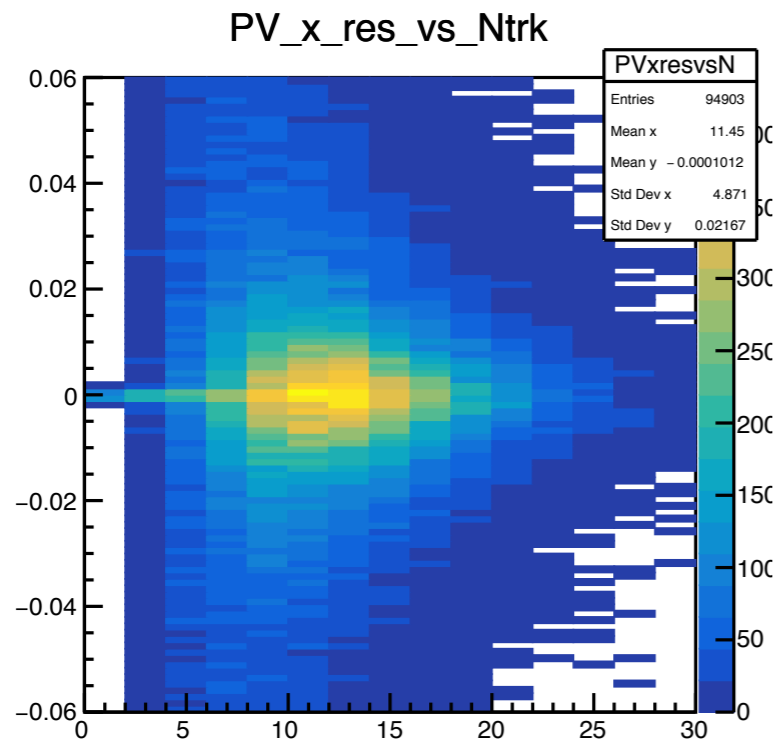
CLICdp New-Software Project-Meeting
26/06/2017



PV resolution: BeamSpotConstraint=TRUE

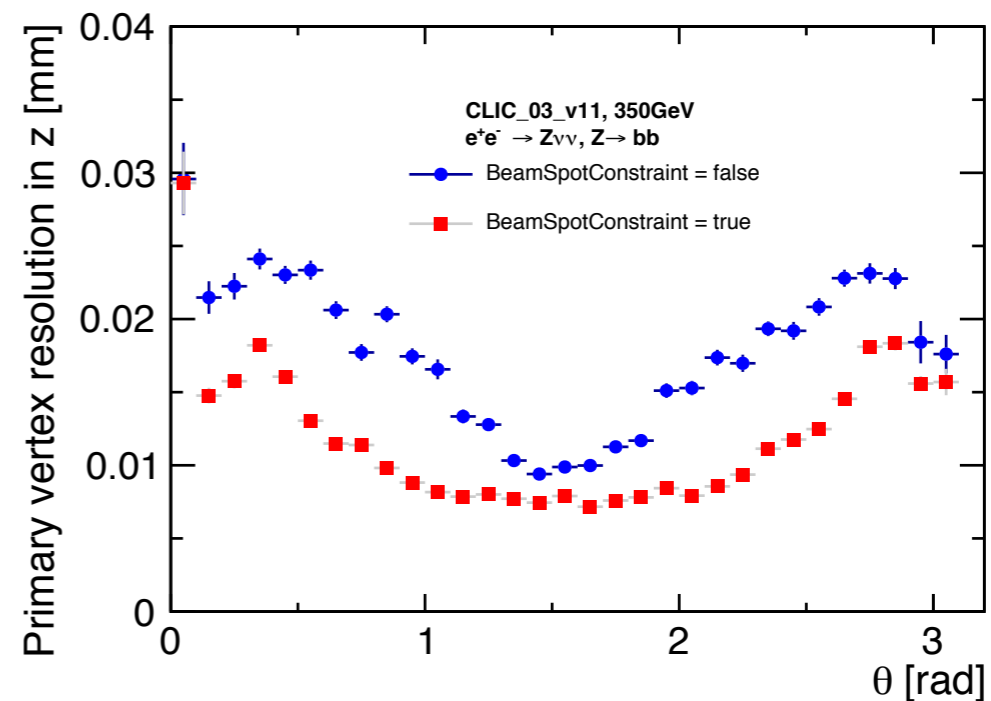
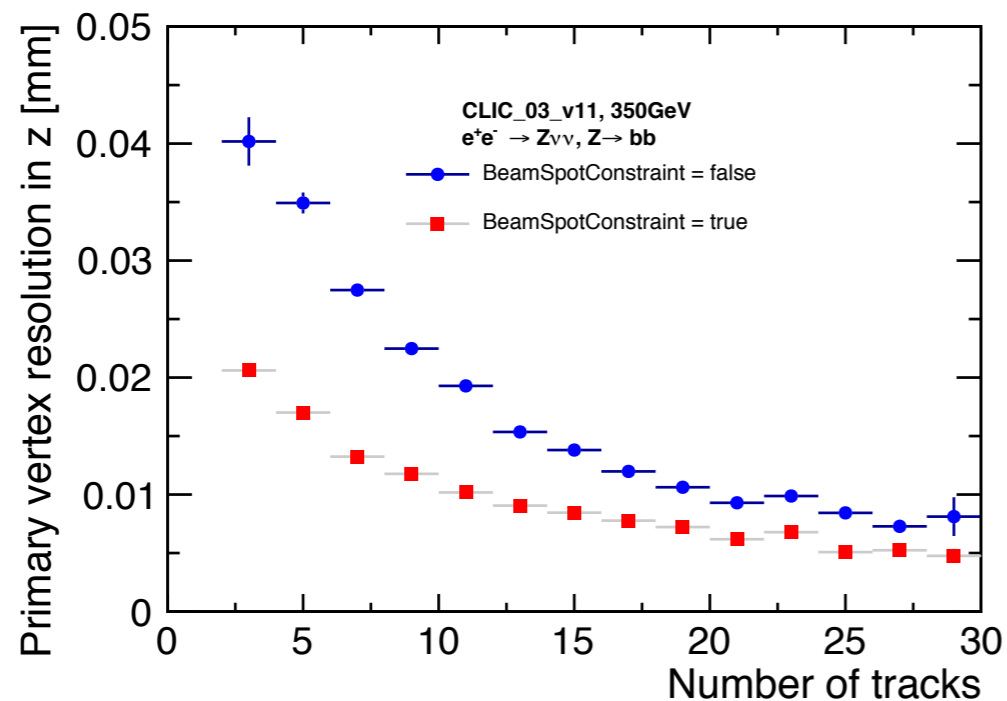


PV resolution: BeamSpotConstraint=**FALSE**

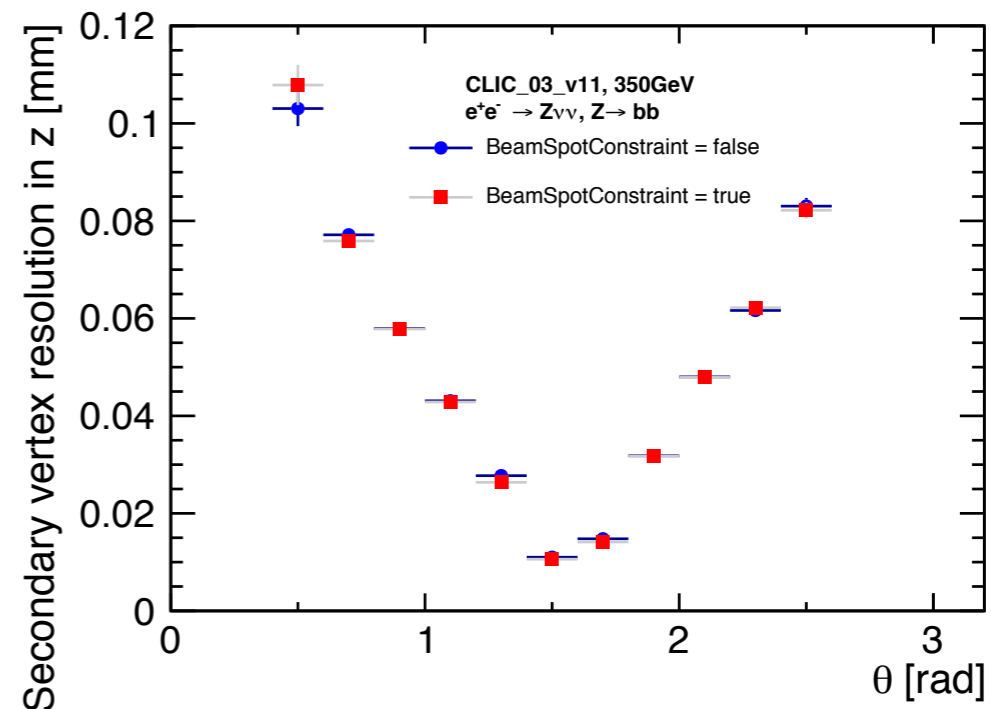
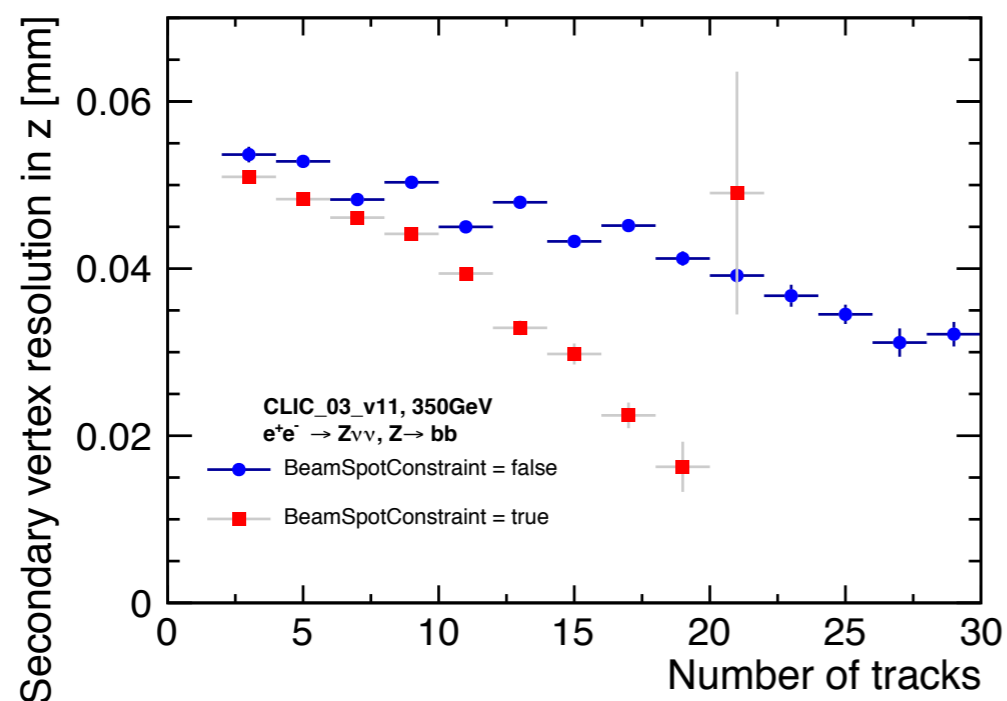


Beam Constrained impact

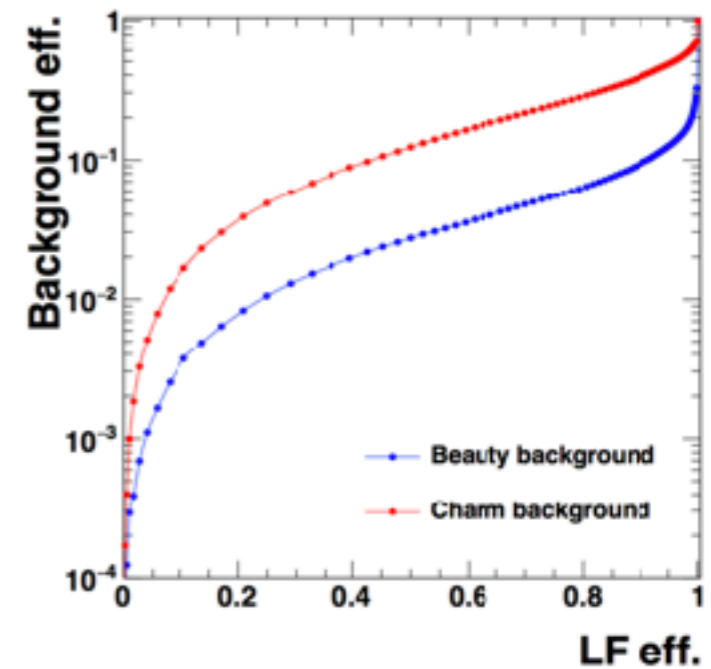
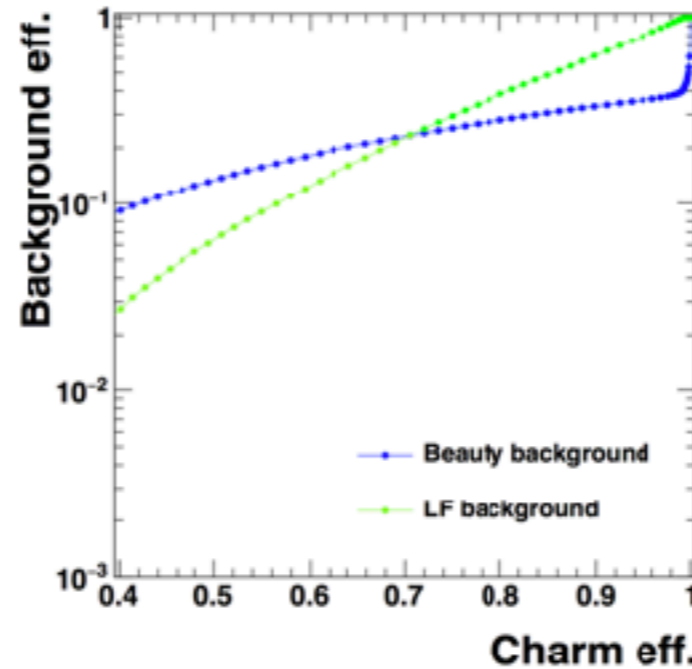
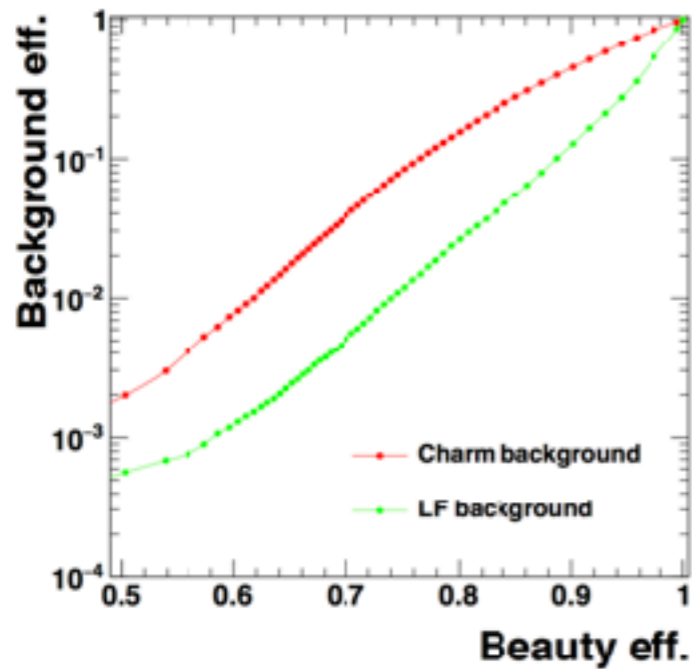
PRIMARY VERTEX



SECONDARY VERTEX



Flavour tagging performance



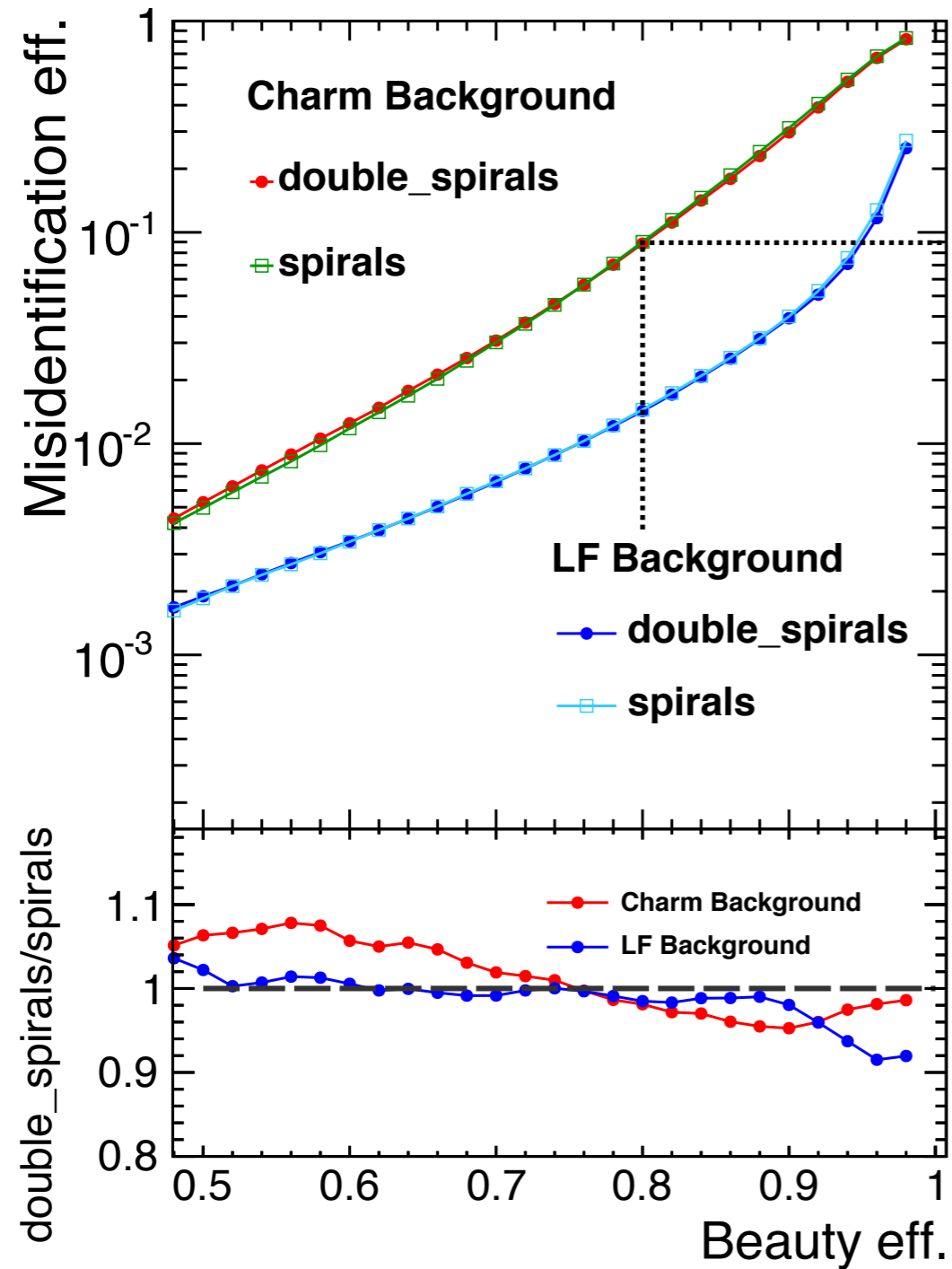
CATEGORY	b-jet	c-jet	uds-jet
A (0,(0-2))	25,3%	66,1%	99,1%
B (1,0)	40,8%	33,1%	0,09%
C (1,1)	16,6%	0,76%	0,002%
D (2,0)	17,3%	0,099%	0,003%

The distribution of b, c and uds jets categorised in terms of the reconstructed number of vertices and single-track pseudo-vertices, studied in a sample of $e^+e^- \rightarrow Z\nu\nu$ ($Z \rightarrow qq$) at $\sqrt{s} = 350\text{GeV}$.

- **D Category:** c and uds jets are highly suppressed
- **C Category:** we recover 16,6% of the b jets, which otherwise would have been grouped together in B Category
- **A Category:** uds jets are confined very well in the zero vertex category 99,1%, it means a really good separation of uds jets from b and c jets

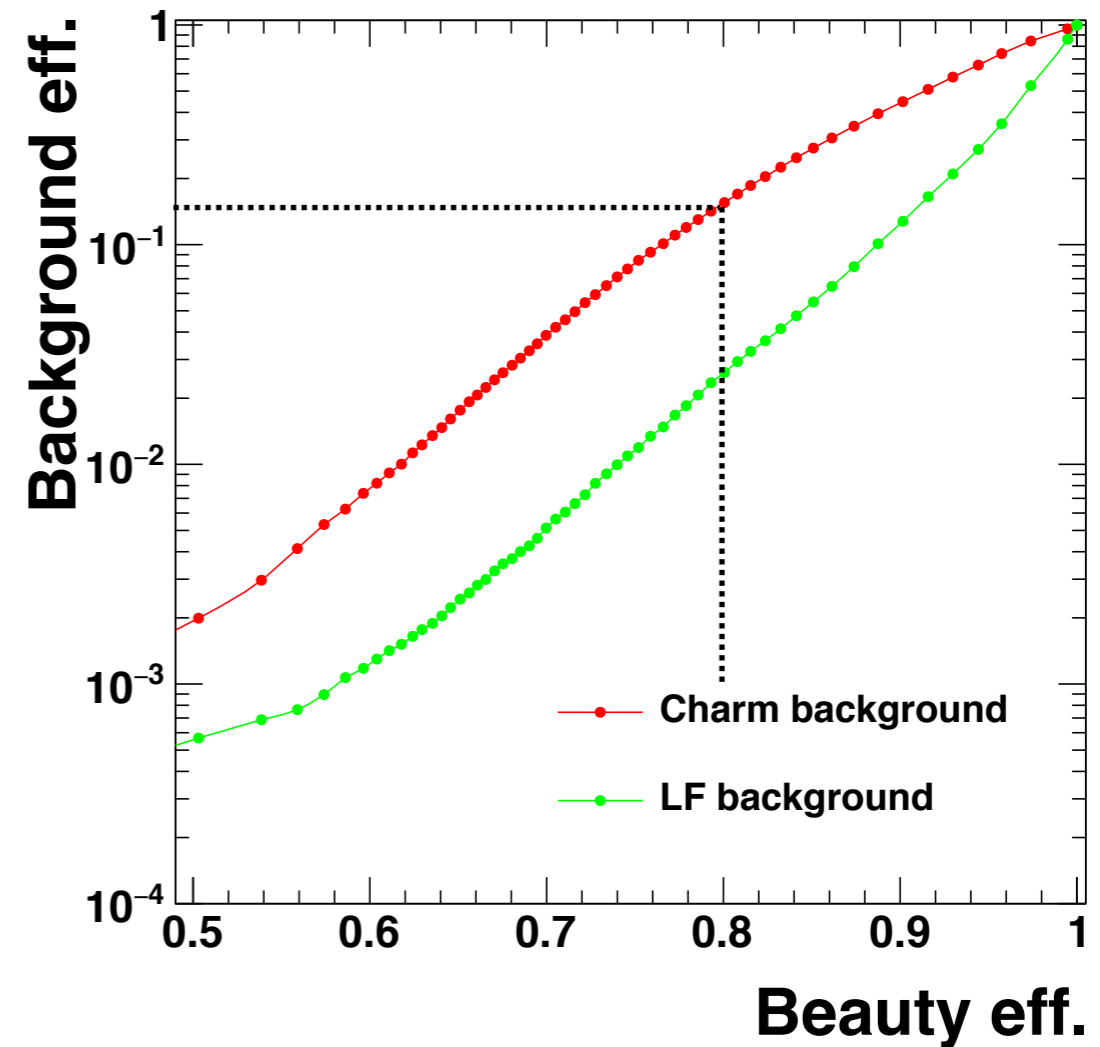
Flavour tagging performance: b-tag

Double spirals



Dijets 500 GeV

CLIC_o3_v11



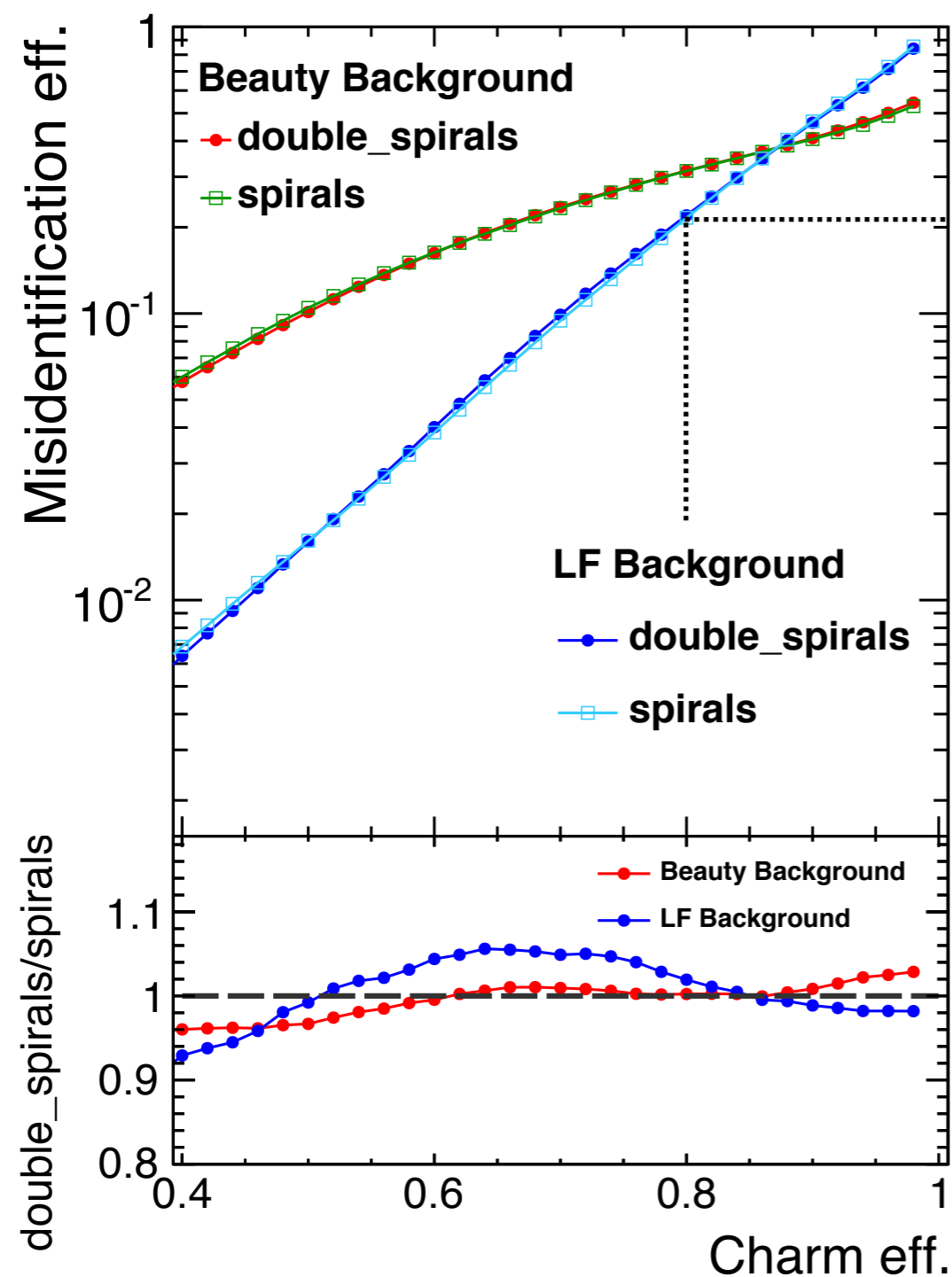
b-tag eff	c background	uds background
80%	15,97%	2,58%

Dijets 380 GeV



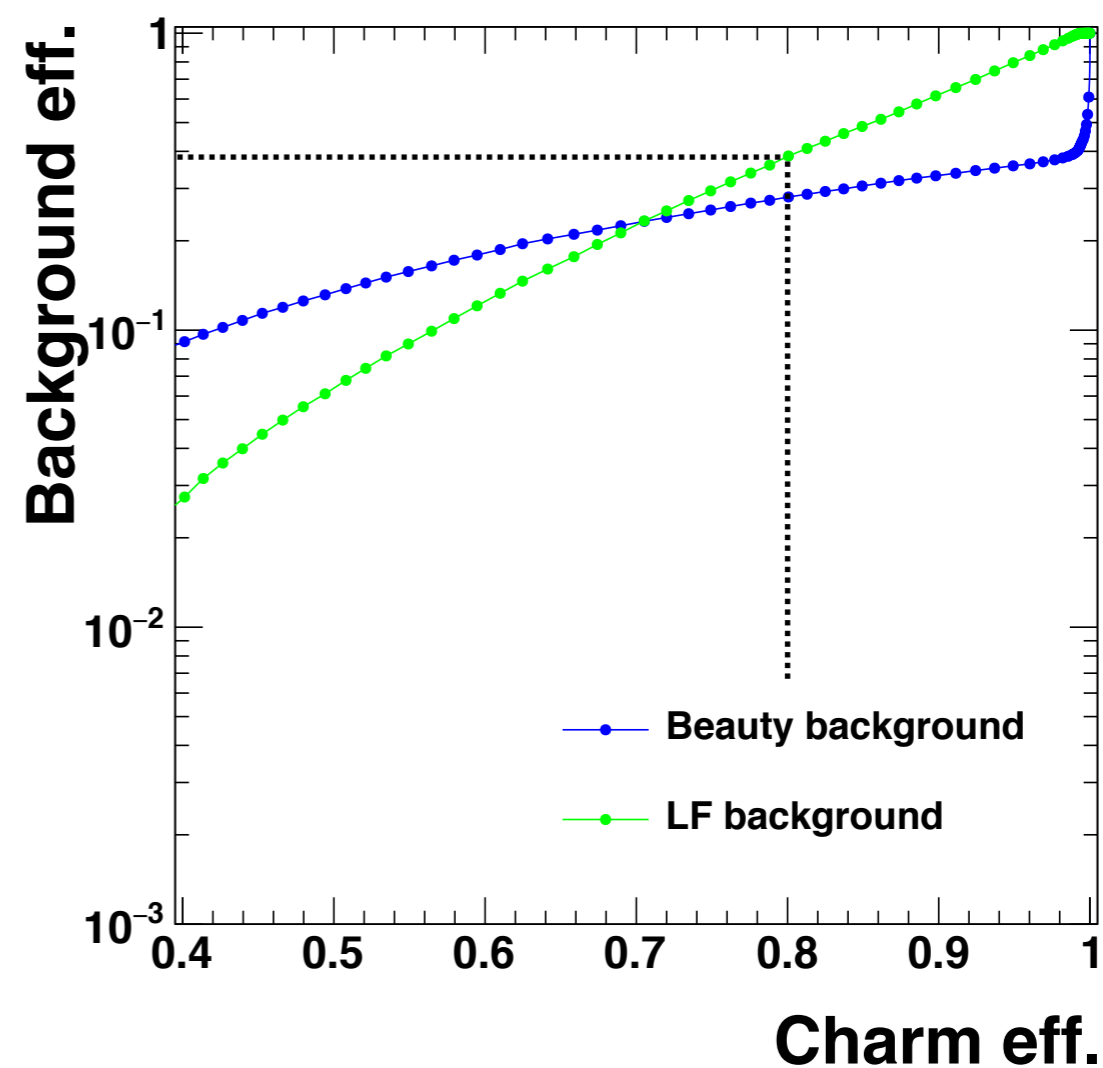
Flavour tagging performance: c-tag

Double spirals



Dijets 500 GeV

CLIC_o3_v11



c-tag eff	b background	uds background
80%	28,1%	38,8%

Dijets 380 GeV

