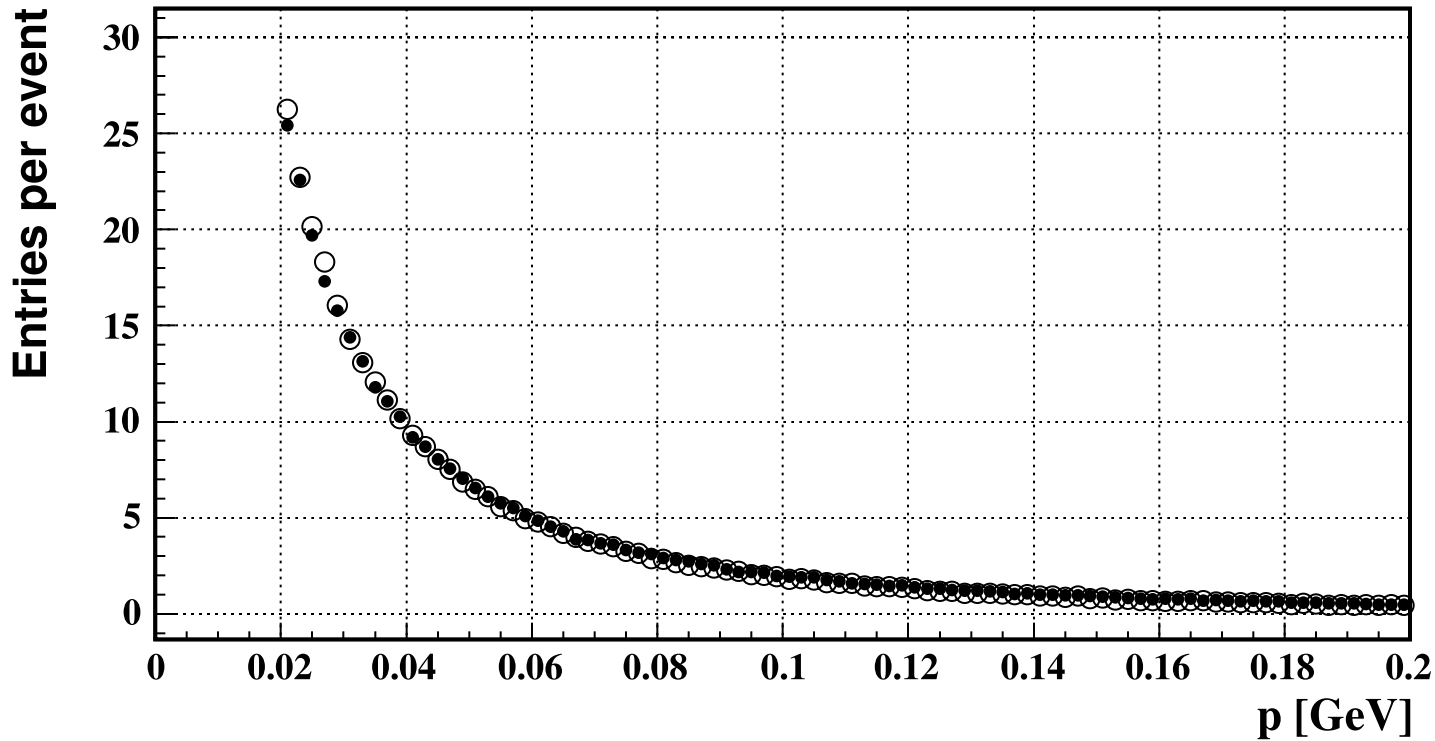


100 GeV Primary γ
Secondary γ

• **GEANT4**

○ **GEANT3**

	GEANT4	GEANT3
Entries	375184	364894
Mean	0.0574	0.0559
RMS	0.04	0.0389
Underflow	0	0
Overflow	31.4	24.8

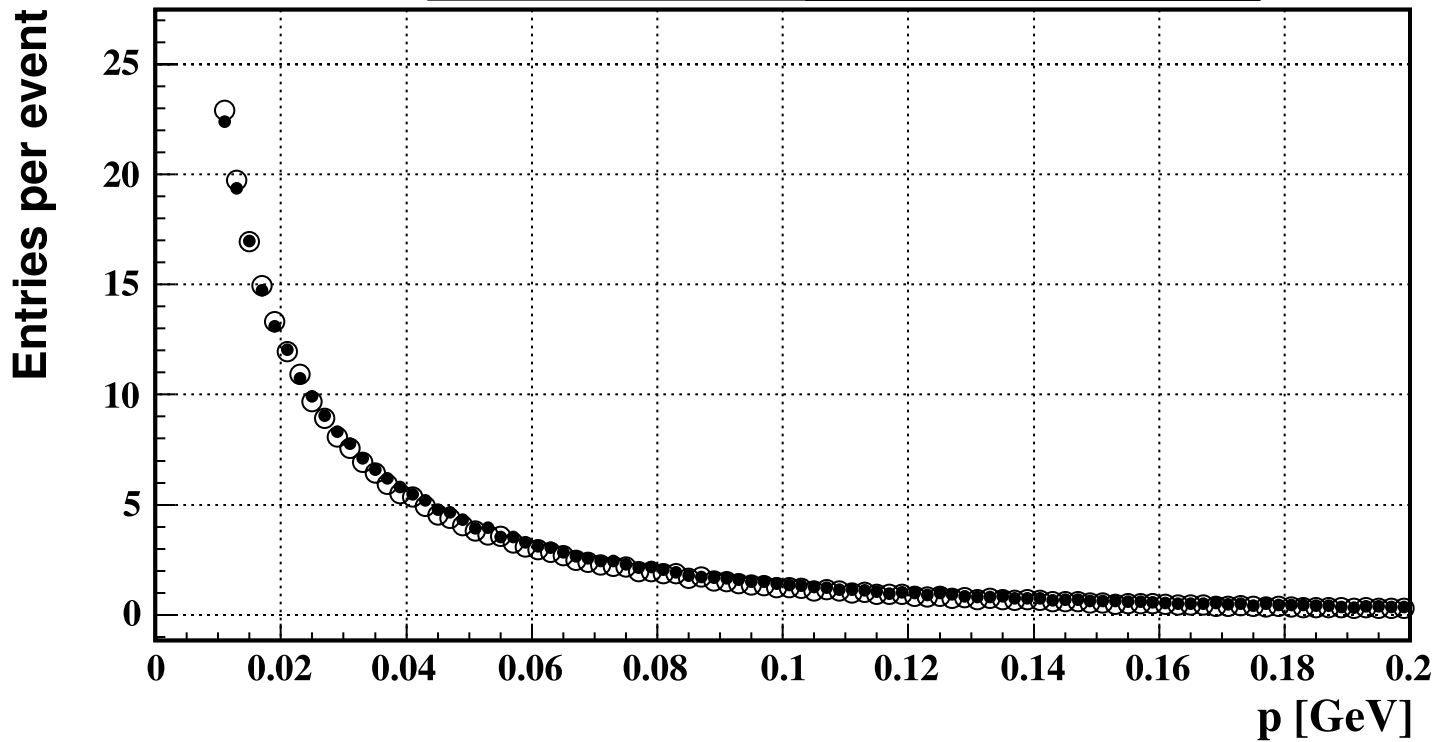


100 GeV Primary γ
Secondary e^+

• **GEANT4**

○ **GEANT3**

	GEANT4	GEANT3
Entries	310337	296359
Mean	0.048	0.046
RMS	0.0413	0.0398
Underflow	0	0
Overflow	19.5	15.7

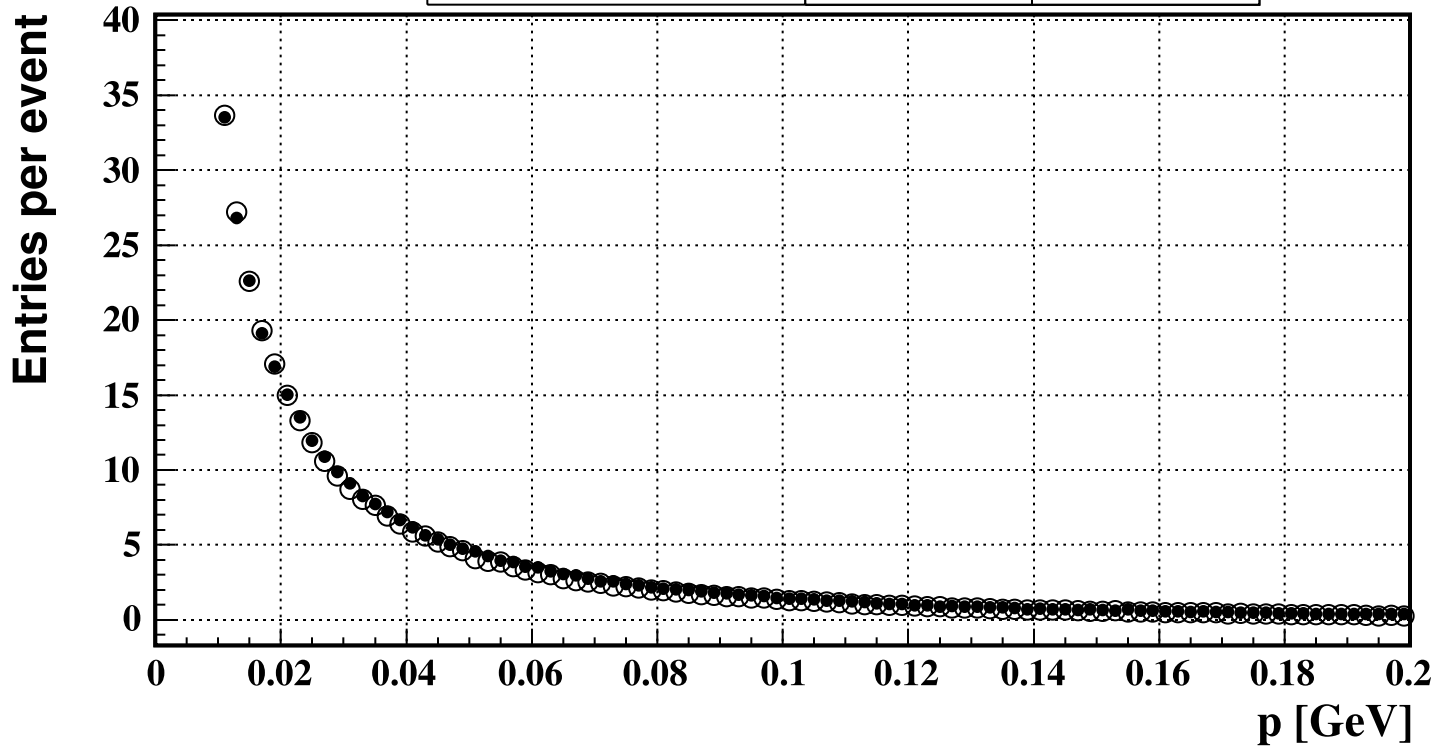


100 GeV Primary γ
Secondary e^-

• **GEANT4**

○ **GEANT3**

	GEANT4	GEANT3
Entries	368196	352223
Mean	0.0444	0.0426
RMS	0.0396	0.0383
Underflow	0	0
Overflow	19.5	15.7

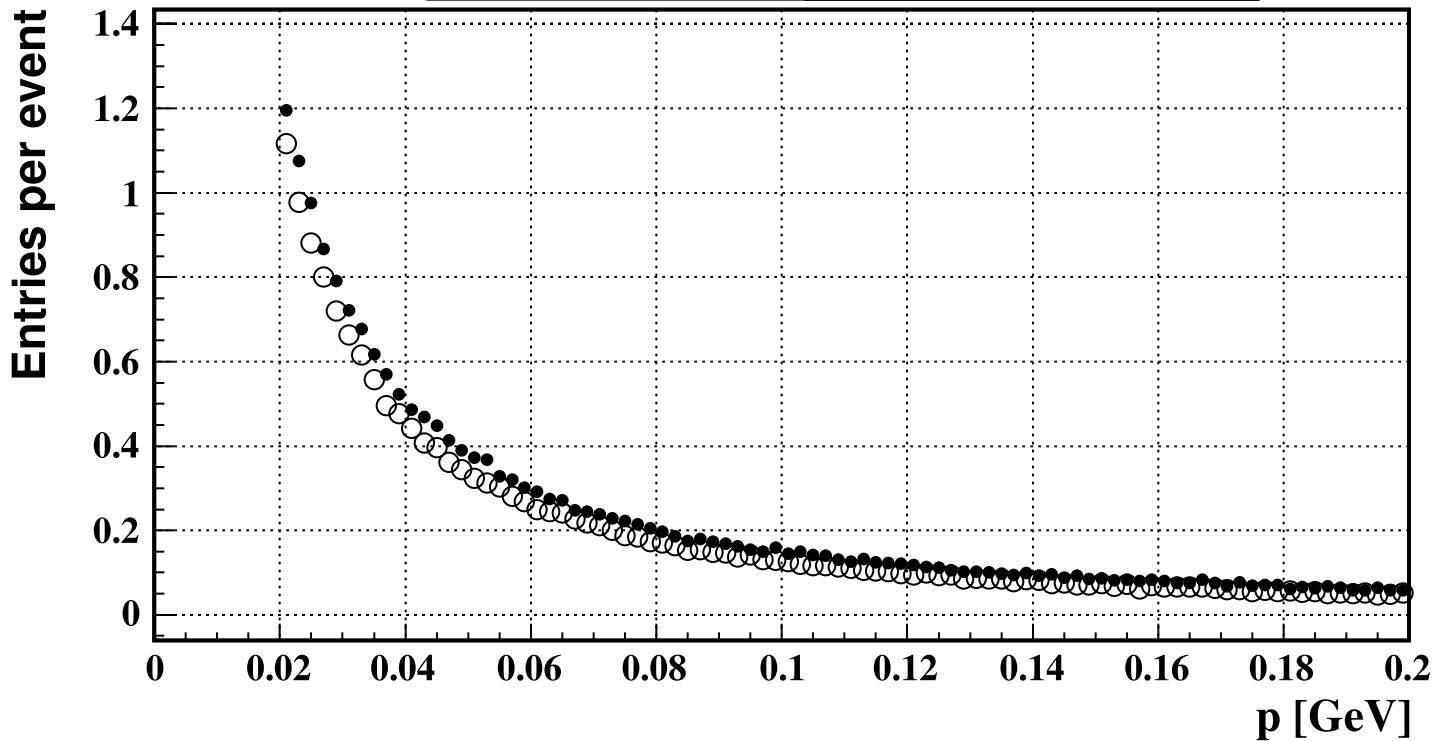


100 GeV Primary π^+
Secondary γ

● GEANT4

○ GEANT3

	GEANT4	GEANT3
Entries	303199	255512
Mean	0.0676	0.0661
RMS	0.0463	0.0456
Underflow	0	0
Overflow	9.66	7.35

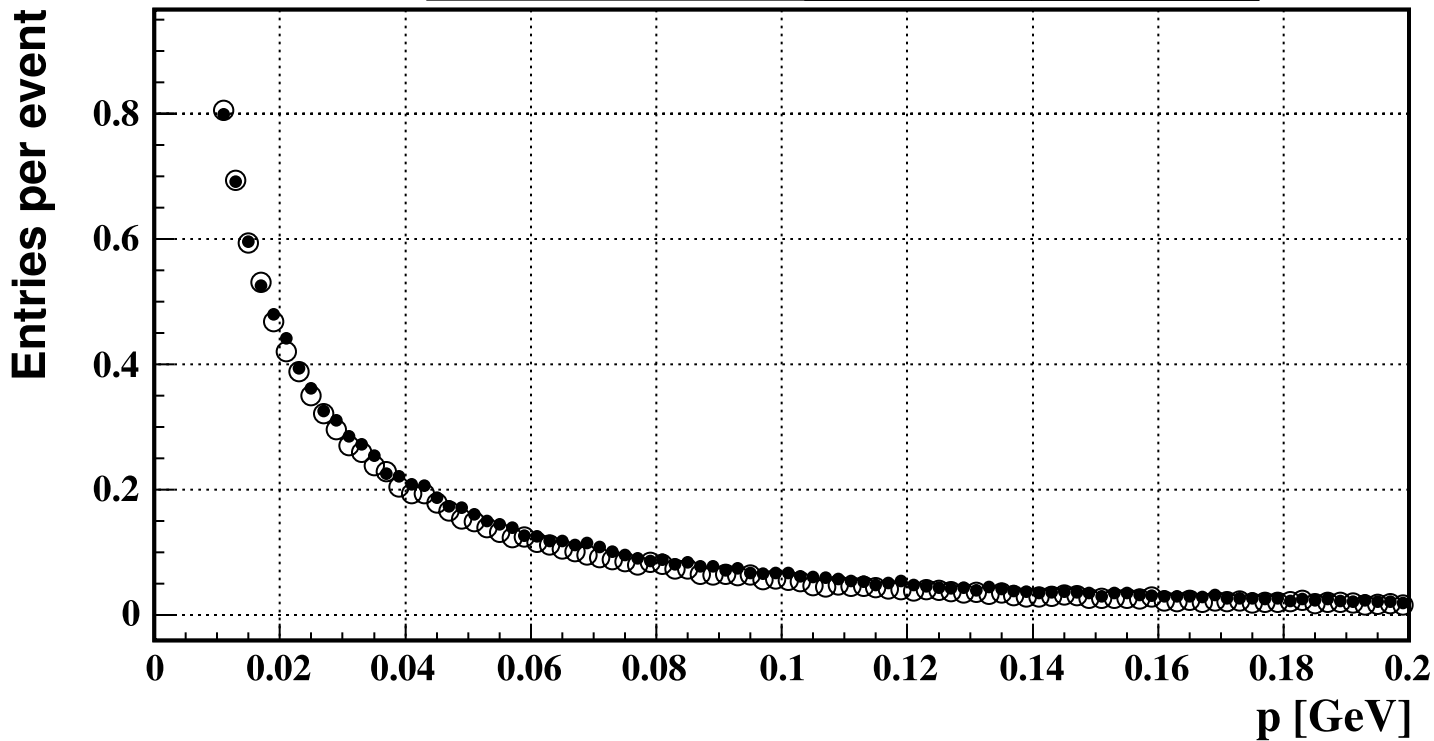


100 GeV Primary π^+
Secondary e^+

• GEANT4

○ GEANT3

	GEANT4	GEANT3
Entries	143513	128050
Mean	0.0534	0.0505
RMS	0.0452	0.0435
Underflow	0	0
Overflow	2.85	2.07

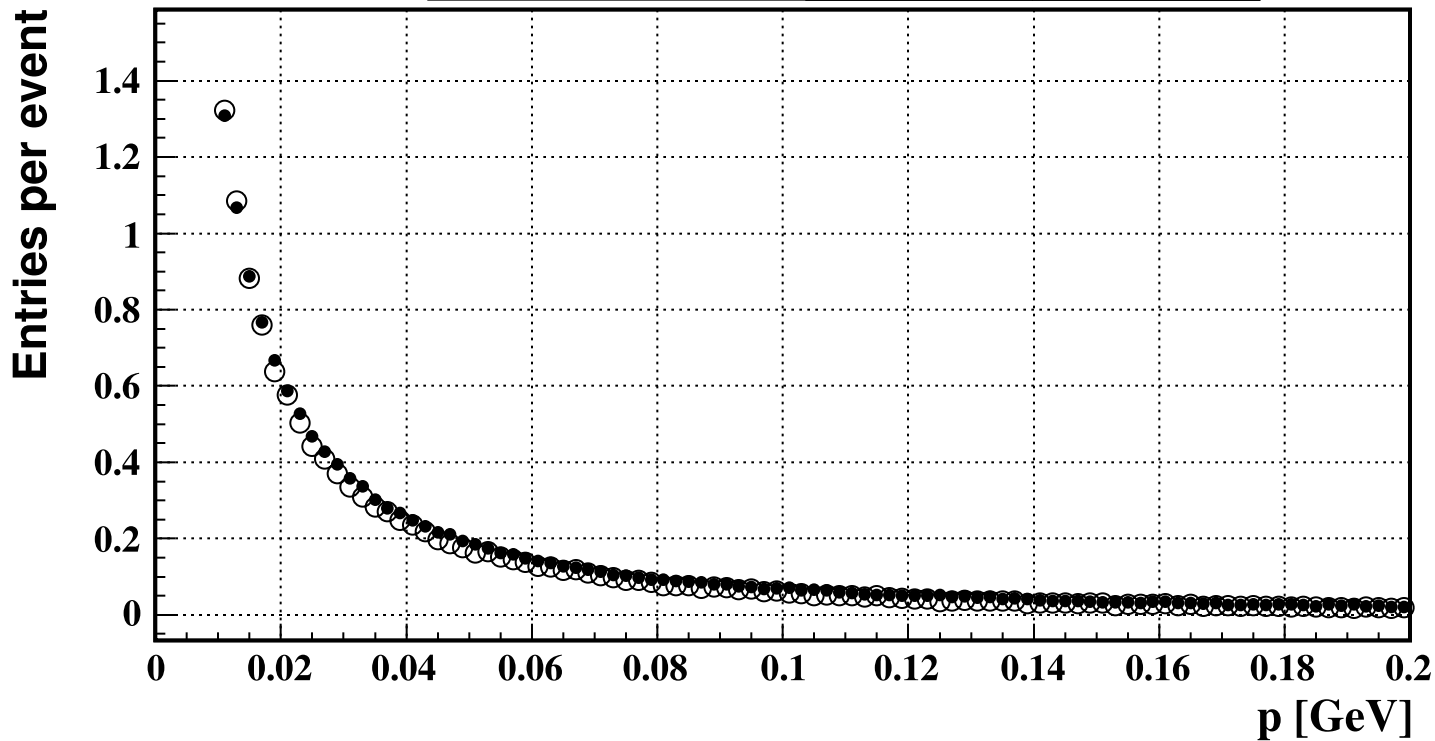


100 GeV Primary π^+
Secondary e

• GEANT4

○ GEANT3

	GEANT4	GEANT3
Entries	173564	156781
Mean	0.0483	0.0458
RMS	0.0433	0.0416
Underflow	0	0
Overflow	2.89	2.11

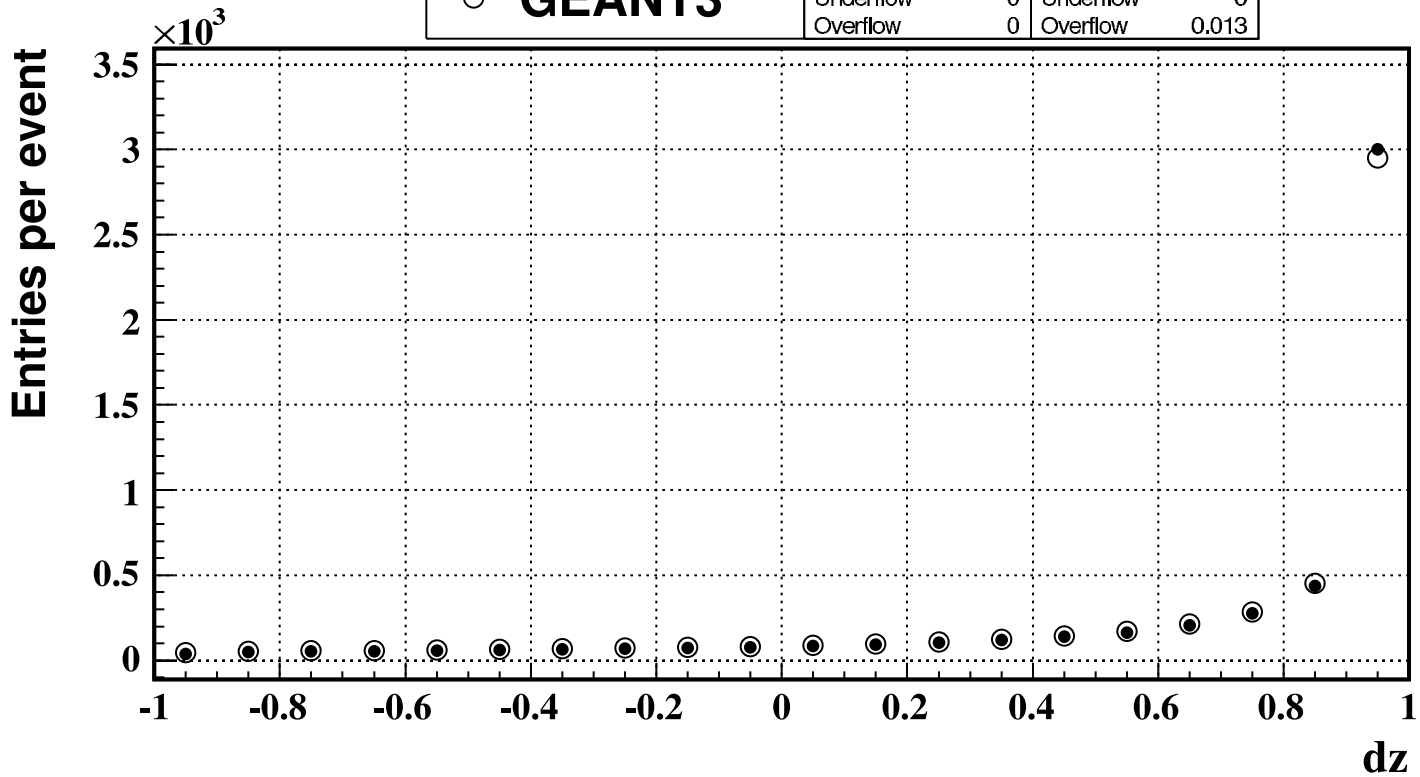


100 GeV Primary γ
Secondary

• GEANT4

○ GEANT3

GEANT4		GEANT3	
Entries	5214884	Entries	5274786
Mean	0.697	Mean	0.682
RMS	0.477	RMS	0.488
Underflow	0	Underflow	0
Overflow	0	Overflow	0.013

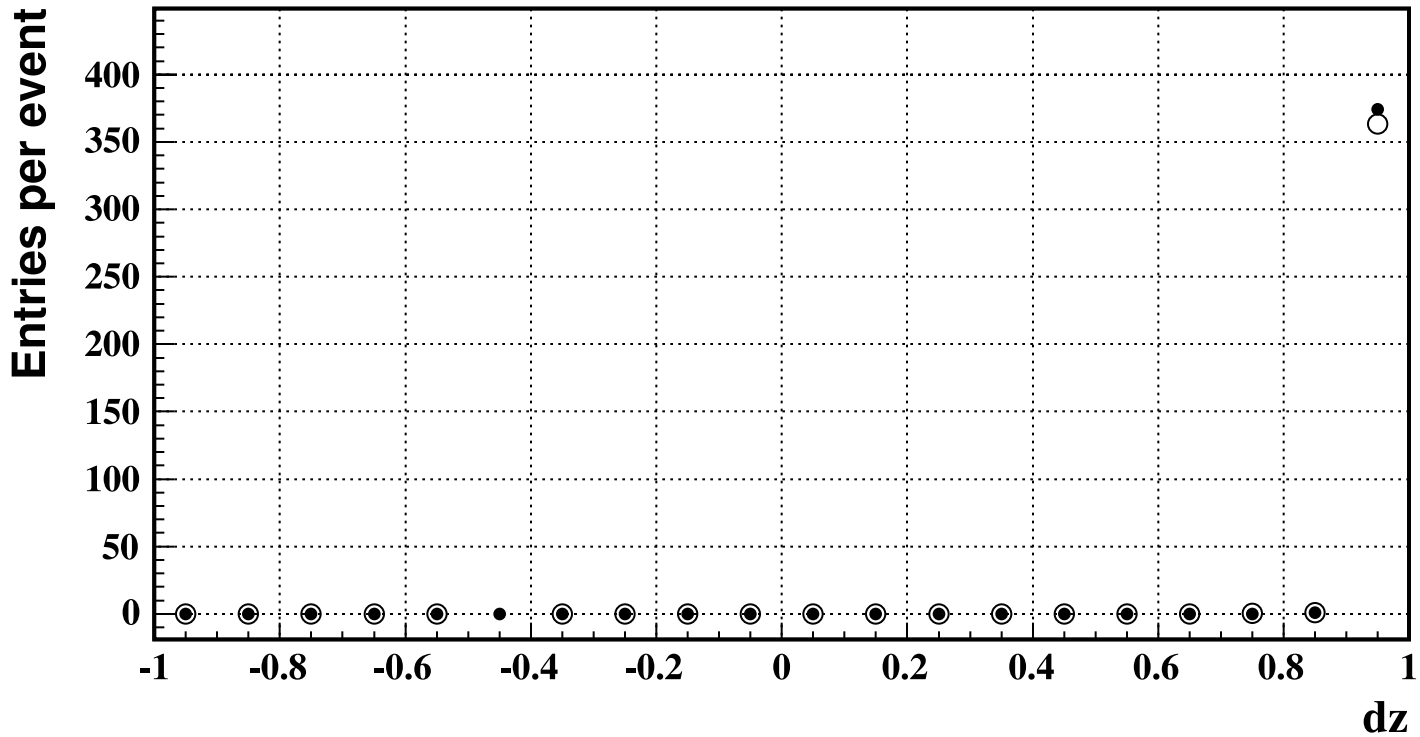


100 GeV Primary γ
Secondary γ

• **GEANT4**

○ **GEANT3**

	GEANT4		GEANT3
Entries	375184	Entries	364894
Mean	0.995	Mean	0.994
RMS	0.0281	RMS	0.0213
Underflow	0	Underflow	0
Overflow	0	Overflow	0

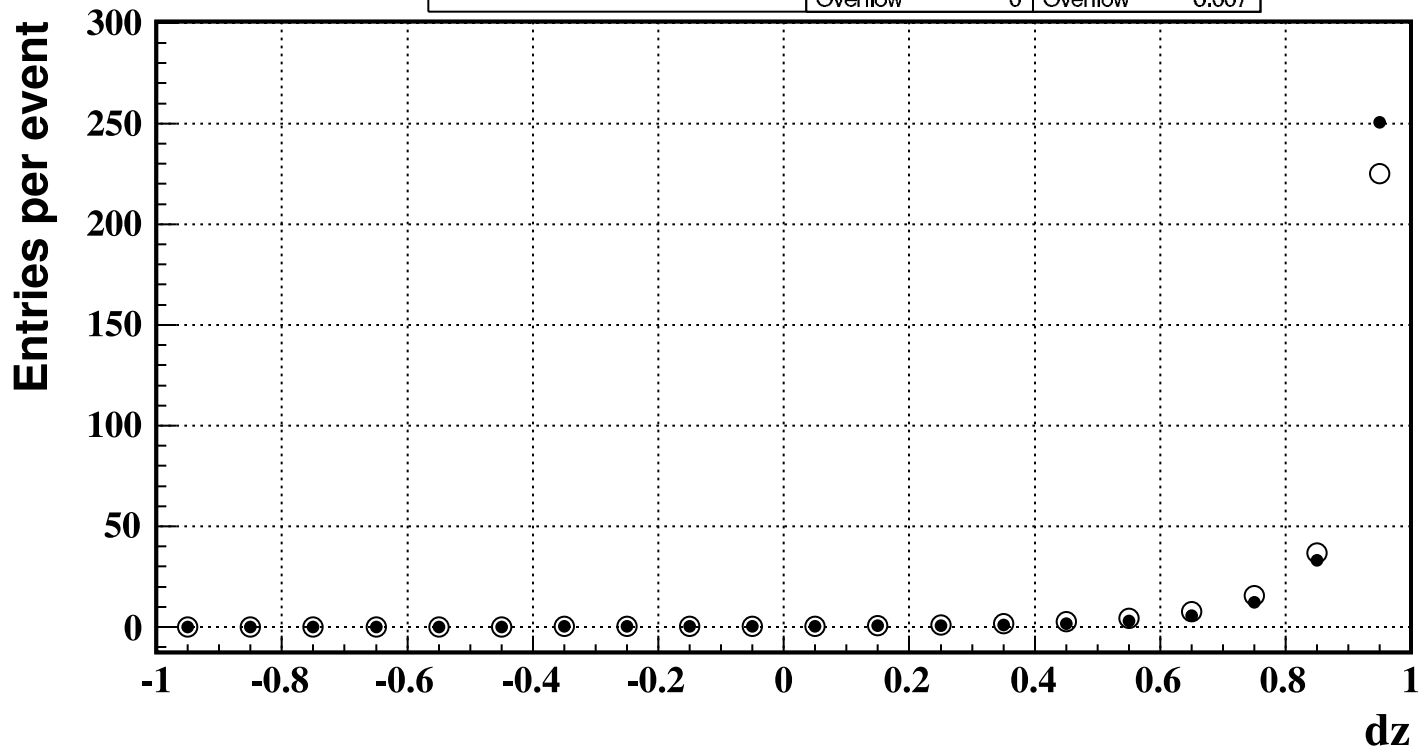


100 GeV Primary γ
Secondary e^+

• **GEANT4**

○ **GEANT3**

GEANT4		GEANT3	
Entries	310337	Entries	296359
Mean	0.93	Mean	0.915
RMS	0.137	RMS	0.15
Underflow	0	Underflow	0
Overflow	0	Overflow	0.007

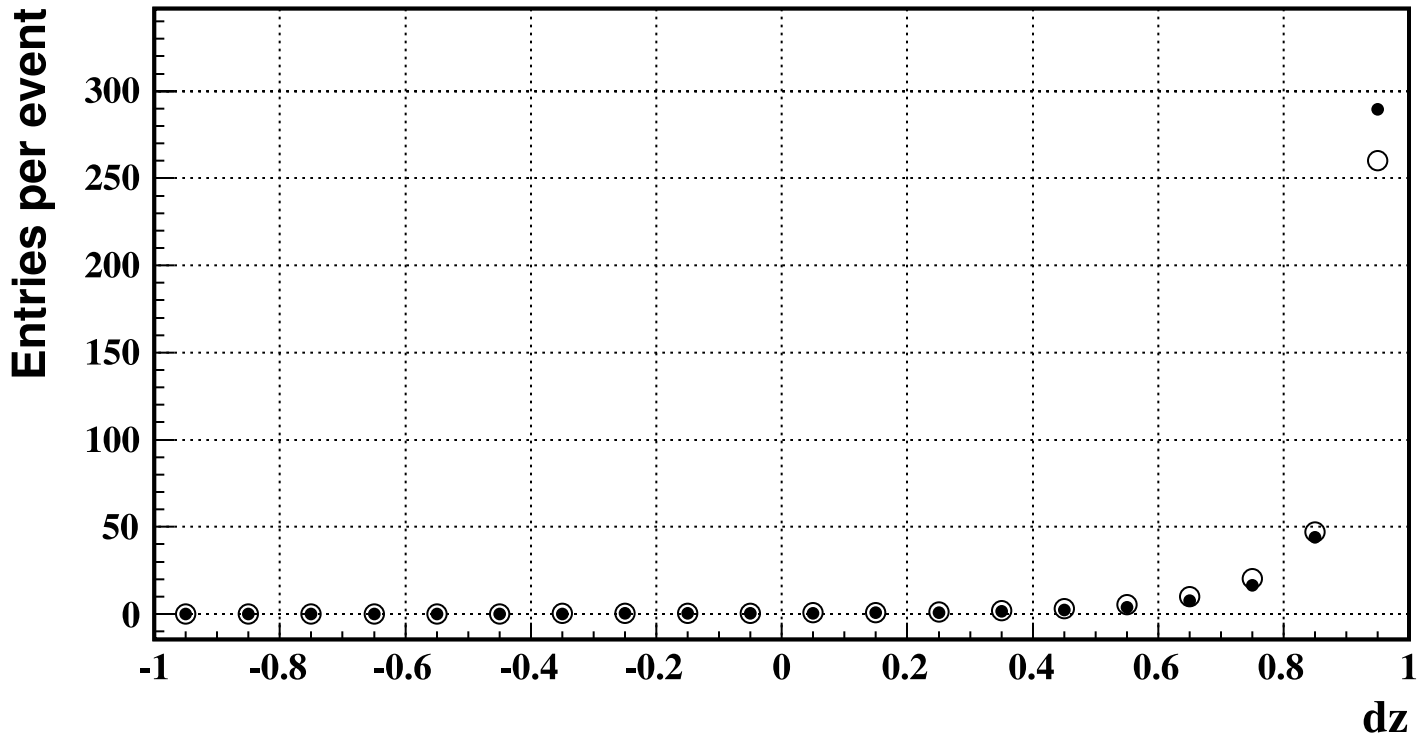


100 GeV Primary γ
Secondary e^-

• GEANT4

○ GEANT3

	GEANT4		GEANT3
Entries	368196	Entries	352223
Mean	0.924	Mean	0.909
RMS	0.142	RMS	0.154
Underflow	0	Underflow	0
Overflow	0	Overflow	0.003

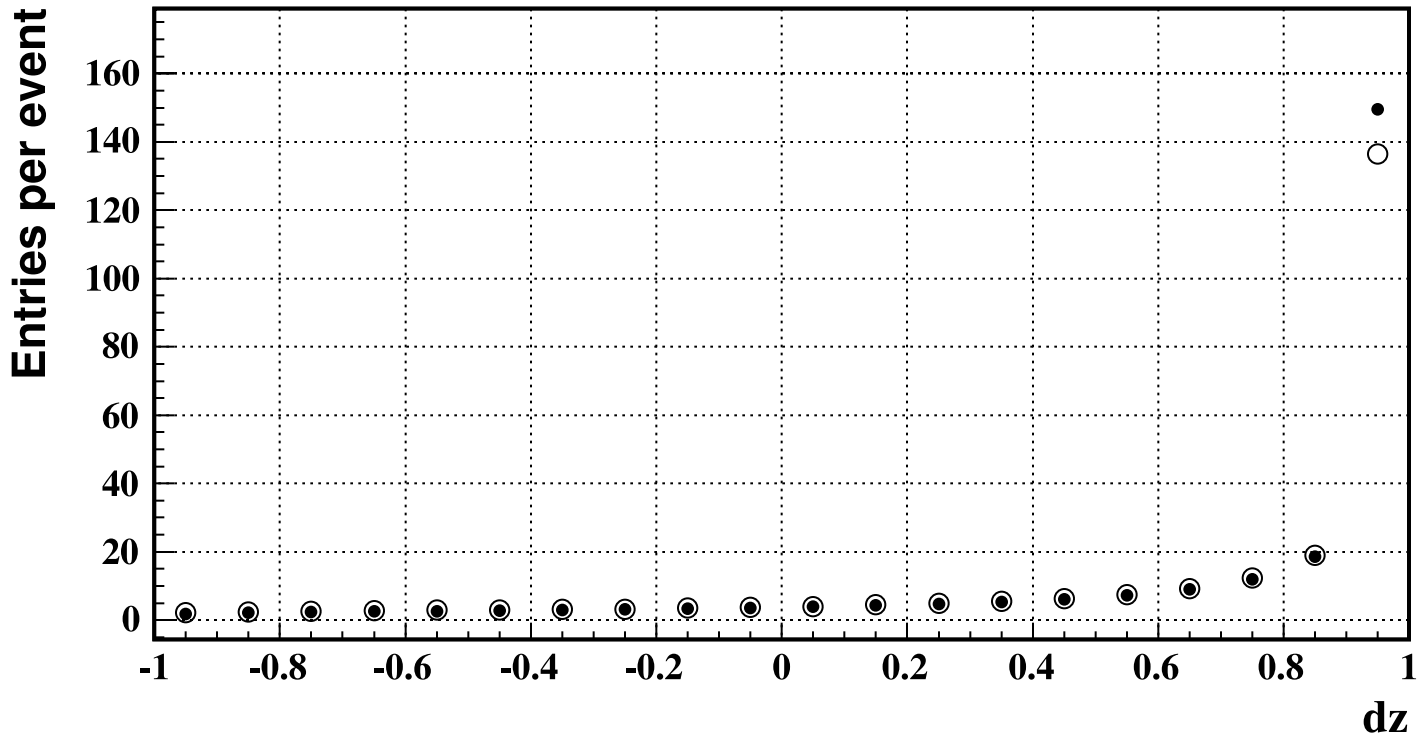


100 GeV Primary π^+
Secondary

• GEANT4

○ GEANT3

GEANT4		GEANT3	
Entries	2475030	Entries	2392163
Mean	0.713	Mean	0.683
RMS	0.473	RMS	0.494
Underflow	0	Underflow	0
Overflow	0	Overflow	0.0015



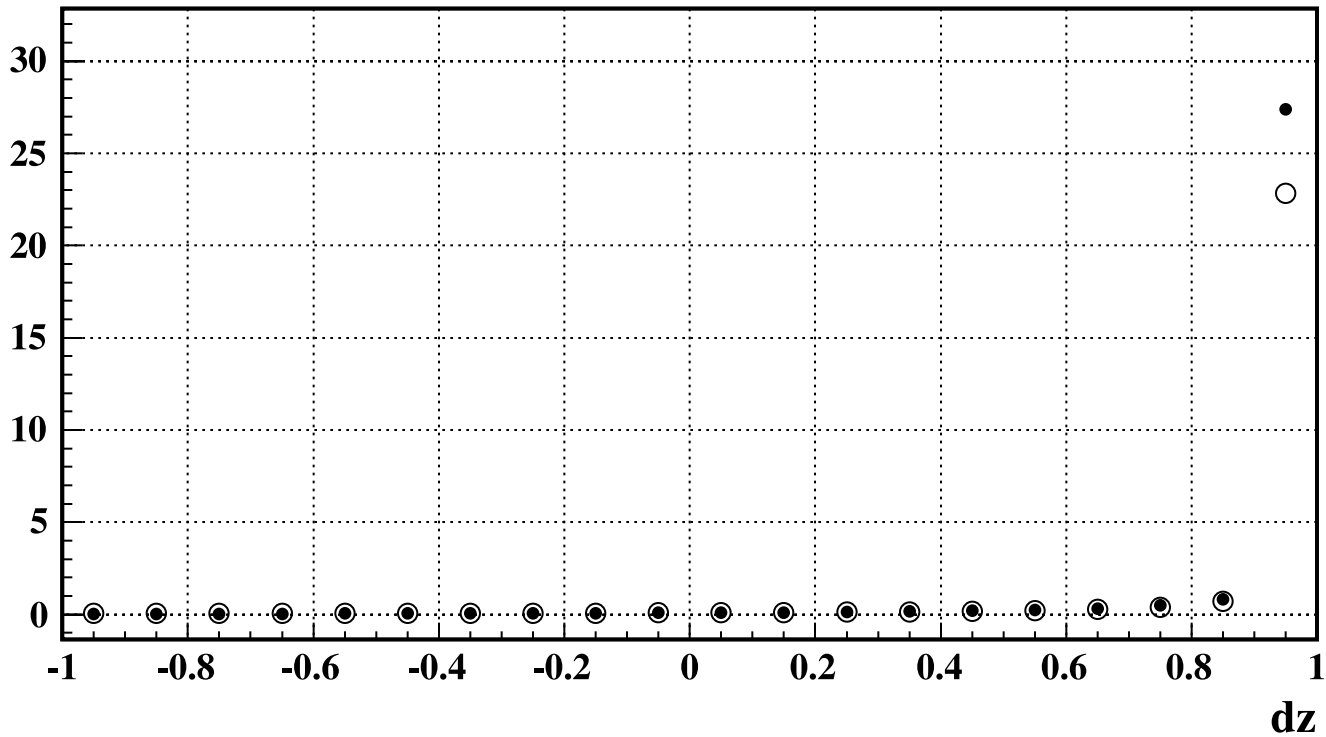
100 GeV Primary π^+
Secondary γ

• GEANT4

○ GEANT3

GEANT4		GEANT3	
Entries	303199	Entries	255512
Mean	0.944	Mean	0.928
RMS	0.208	RMS	0.254
Underflow	0	Underflow	0
Overflow	0	Overflow	0.0001

Entries per event

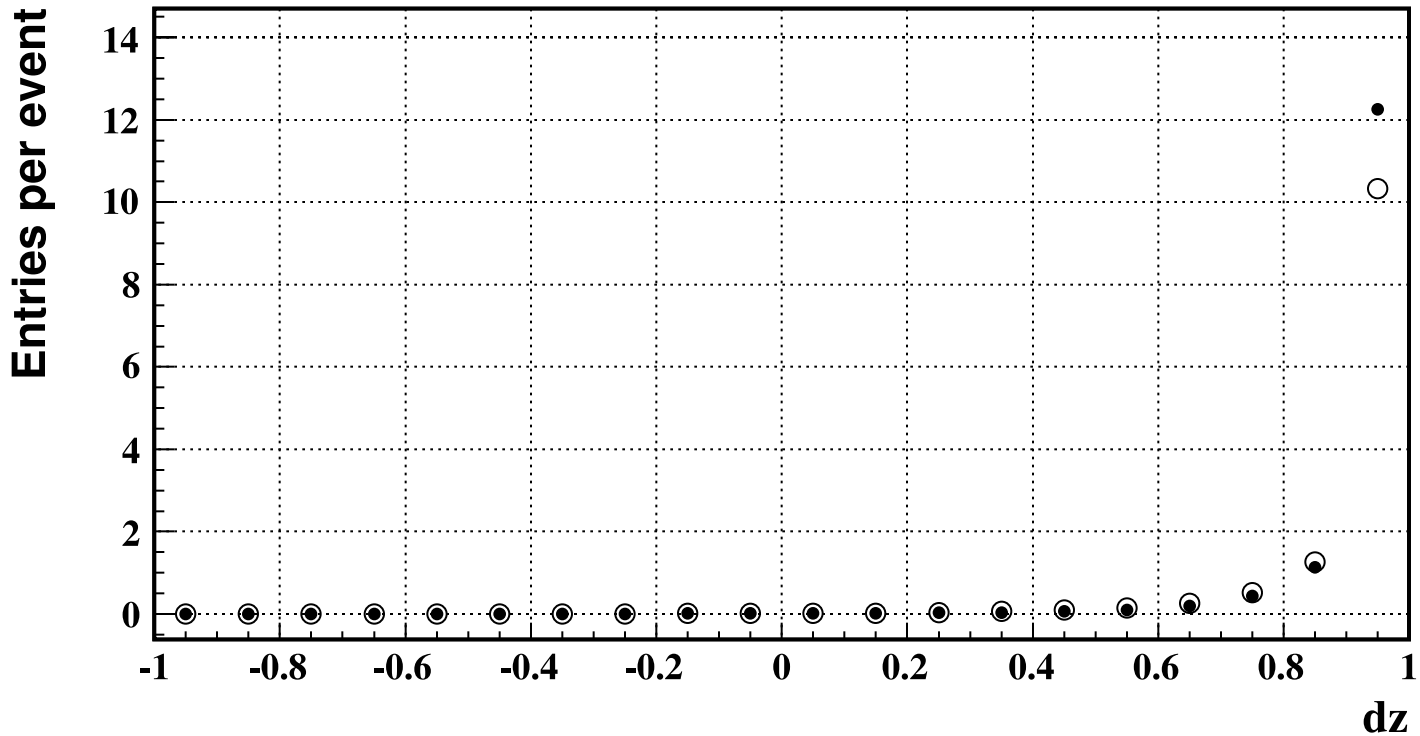


100 GeV Primary π^+
Secondary e^+

• GEANT4

○ GEANT3

GEANT4		GEANT3	
Entries	143513	Entries	128050
Mean	0.944	Mean	0.928
RMS	0.134	RMS	0.152
Underflow	0	Underflow	0
Overflow	0	Overflow	0.0006

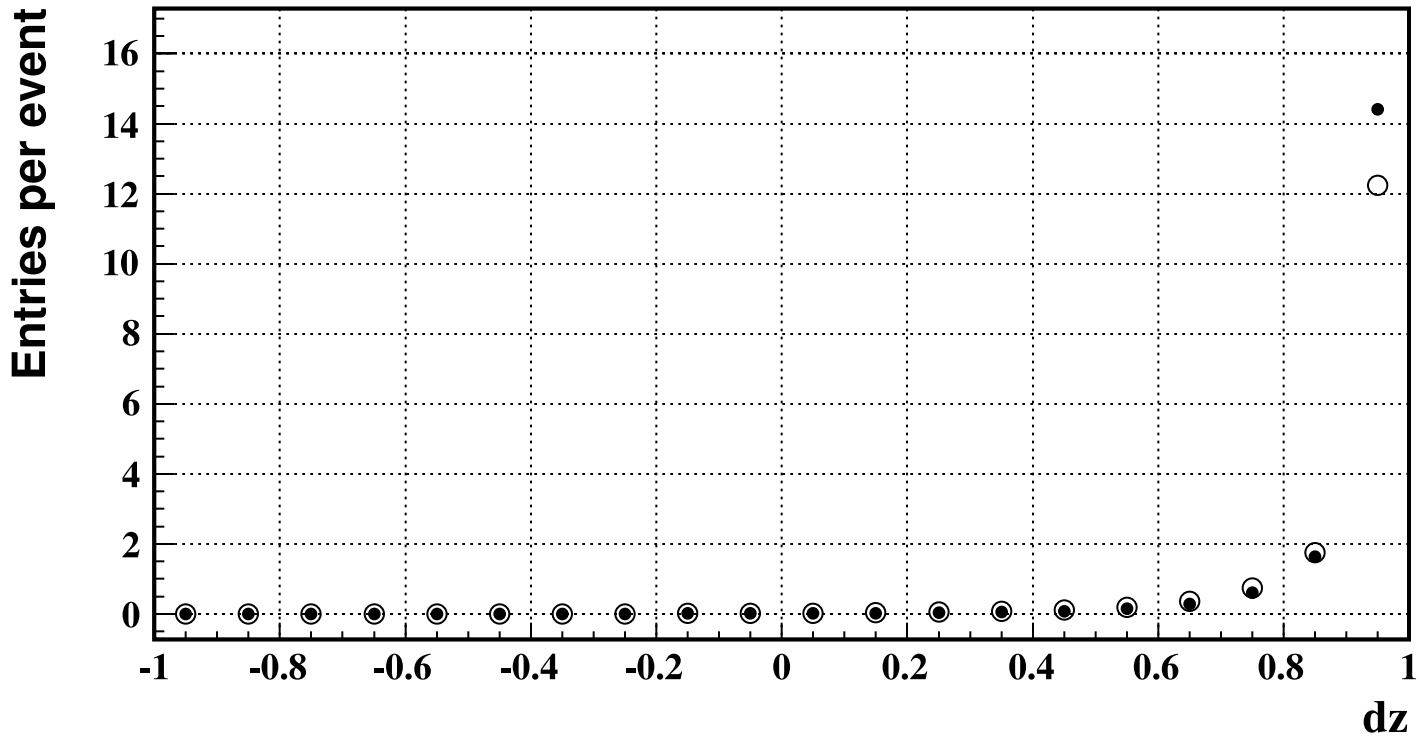


100 GeV Primary π^+
Secondary e^-

• GEANT4

○ GEANT3

GEANT4		GEANT3	
Entries	173564	Entries	156781
Mean	0.937	Mean	0.921
RMS	0.139	RMS	0.154
Underflow	0	Underflow	0
Overflow	0	Overflow	0.0004



100 GeV Primary π^+
Secondary π^+

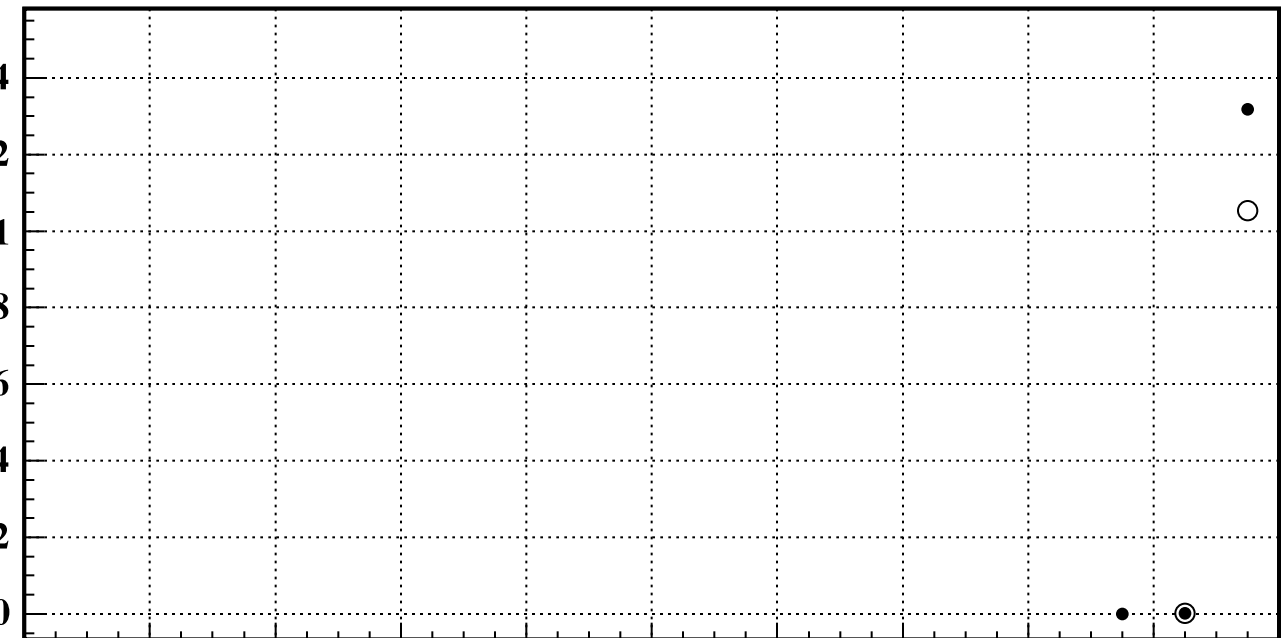
• **GEANT4**

○ **GEANT3**

GEANT4		GEANT3	
Entries	13186	Entries	10544
Mean	0.997	Mean	0.996
RMS	0.00766	RMS	0.0096
Underflow	0	Underflow	0
Overflow	0	Overflow	0

Entries per event

1.4
1.2
1
0.8
0.6
0.4
0.2
0



dz

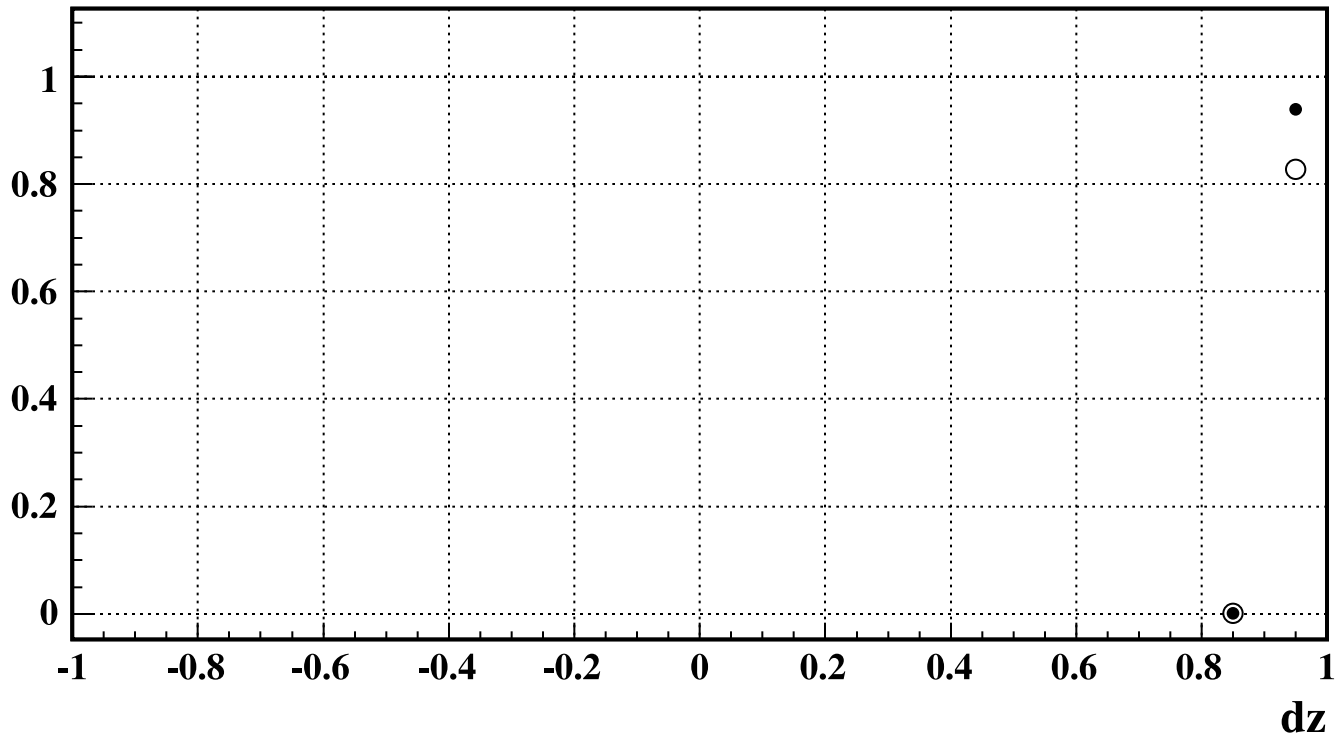
100 GeV Primary π^+
Secondary π^-

• **GEANT4**

○ **GEANT3**

GEANT4		GEANT3	
Entries	9393	Entries	8284
Mean	0.996	Mean	0.995
RMS	0.00756	RMS	0.01
Underflow	0	Underflow	0
Overflow	0	Overflow	0

Entries per event

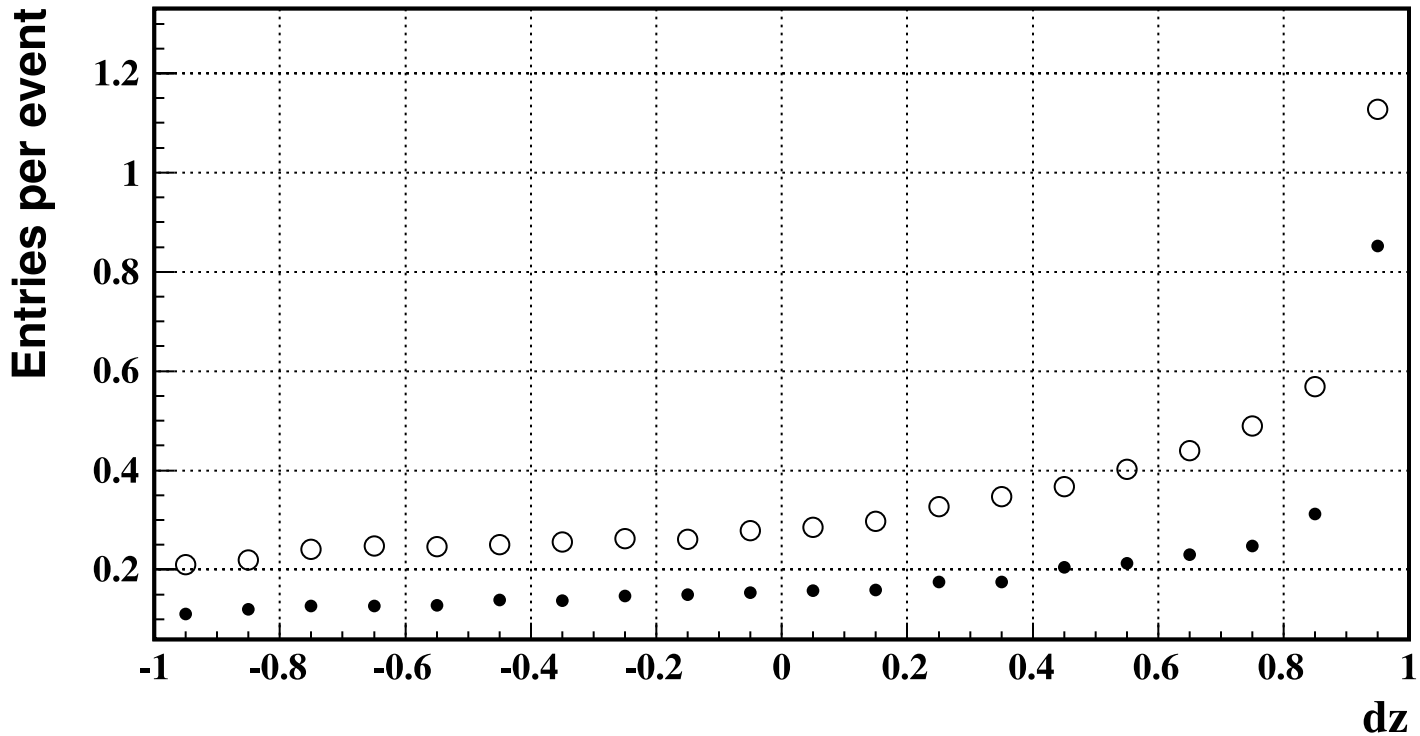


100 GeV Primary π^+
Secondary n

• **GEANT4**

○ **GEANT3**

	GEANT4		GEANT3	
Entries	40626		Entries	71220
Mean	0.281		Mean	0.237
RMS	0.607		RMS	0.6
Underflow	0		Underflow	0
Overflow	0		Overflow	0



100 GeV Primary π^+
Secondary p

• **GEANT4**

○ **GEANT3**

	GEANT4		GEANT3	
Entries	19358		26354	
Mean	0.503		0.476	
RMS	0.543		0.537	
Underflow	0		0	
Overflow	0		0	

