

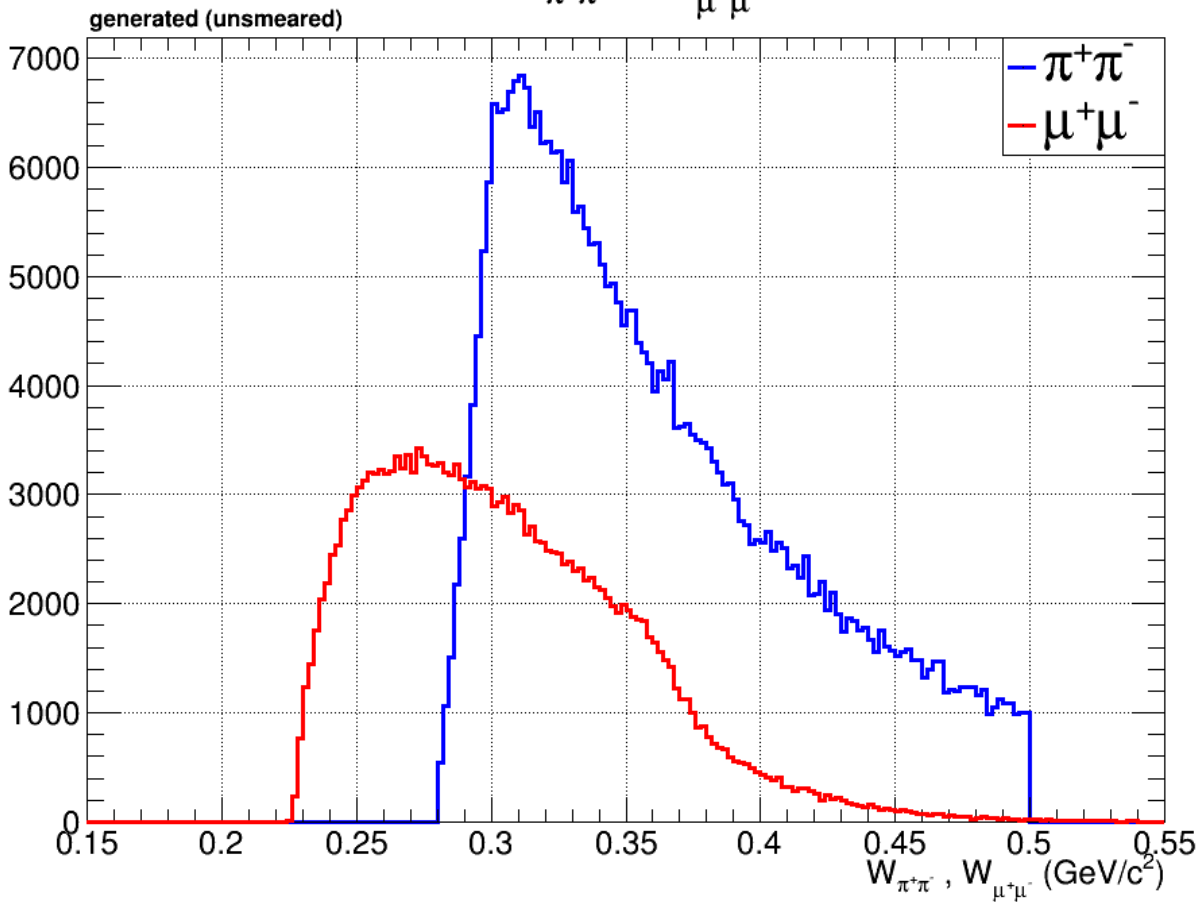
Simulation Update

David Lawrence

June 27, 2017

$W_{\pi^+\pi^-}, W_{\mu^+\mu^-}$

June 27, 2017 DL
git revision #1f47c74

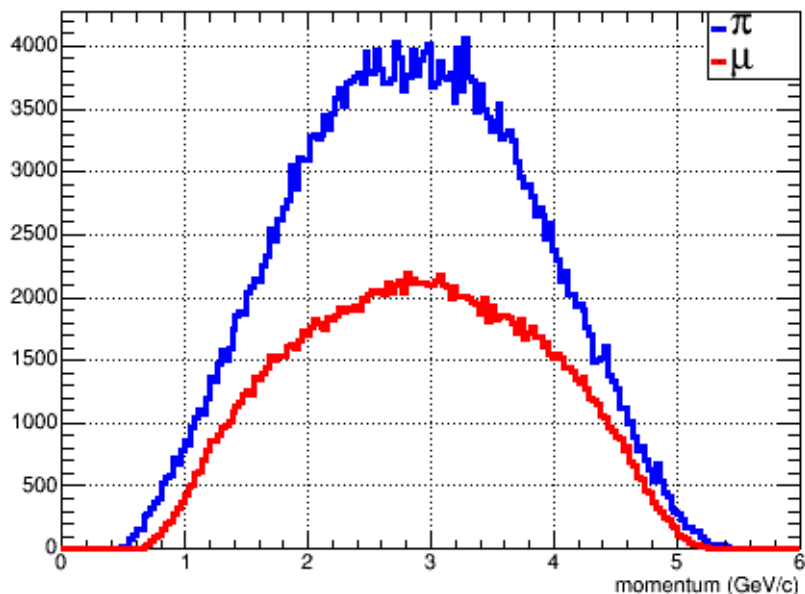


$\pi^+\pi^-$: Primakoff only (Elton)
 $\mu^+\mu^-$: *gen_2mu* (David)

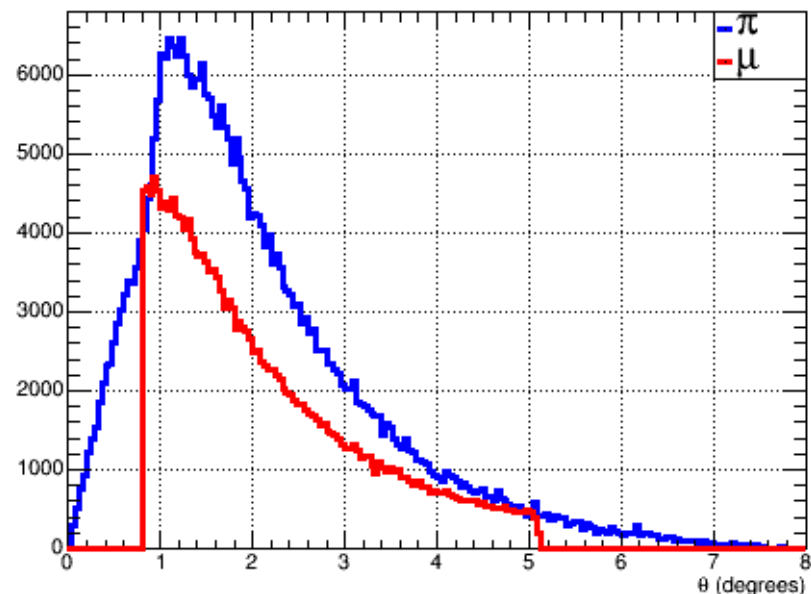
200k events of each type

Generated

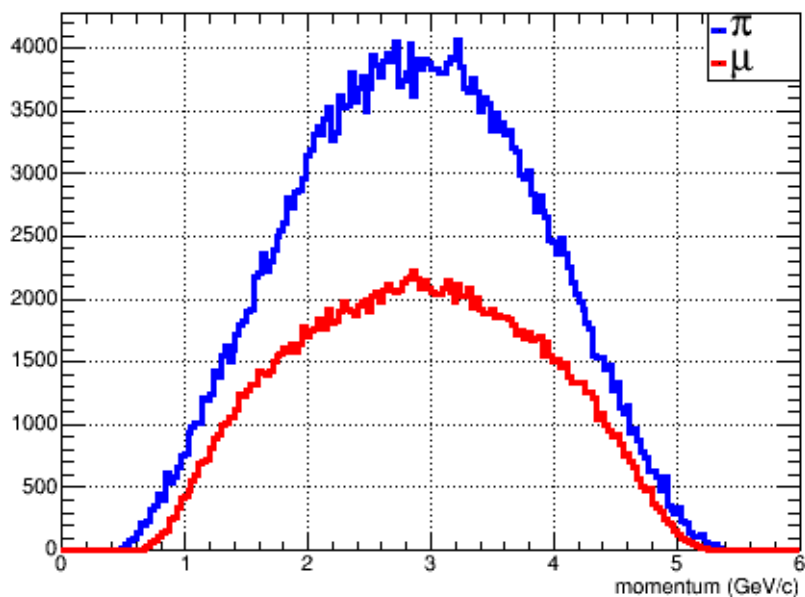
$\pi^+ \mu^+$ Momentum



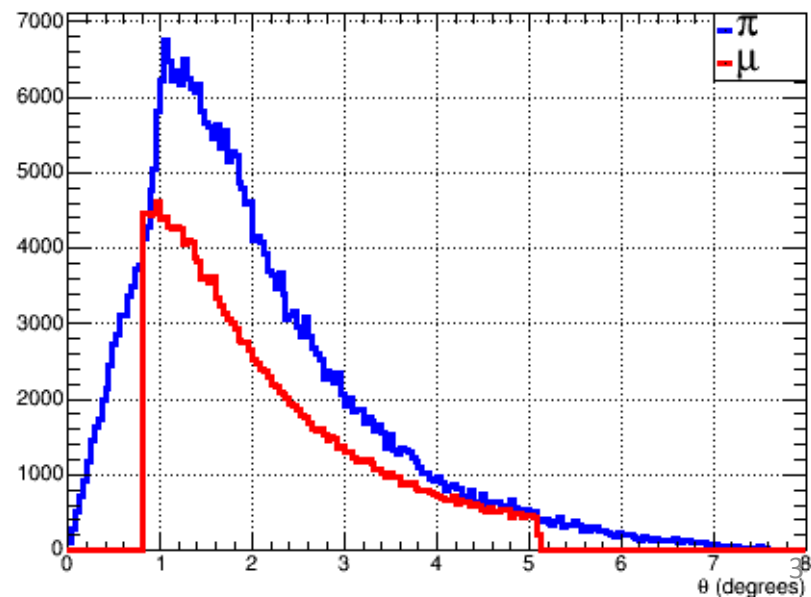
$\pi^+ \mu^+$ Theta



$\pi^- \mu^-$ Momentum



$\pi^- \mu^-$ Theta



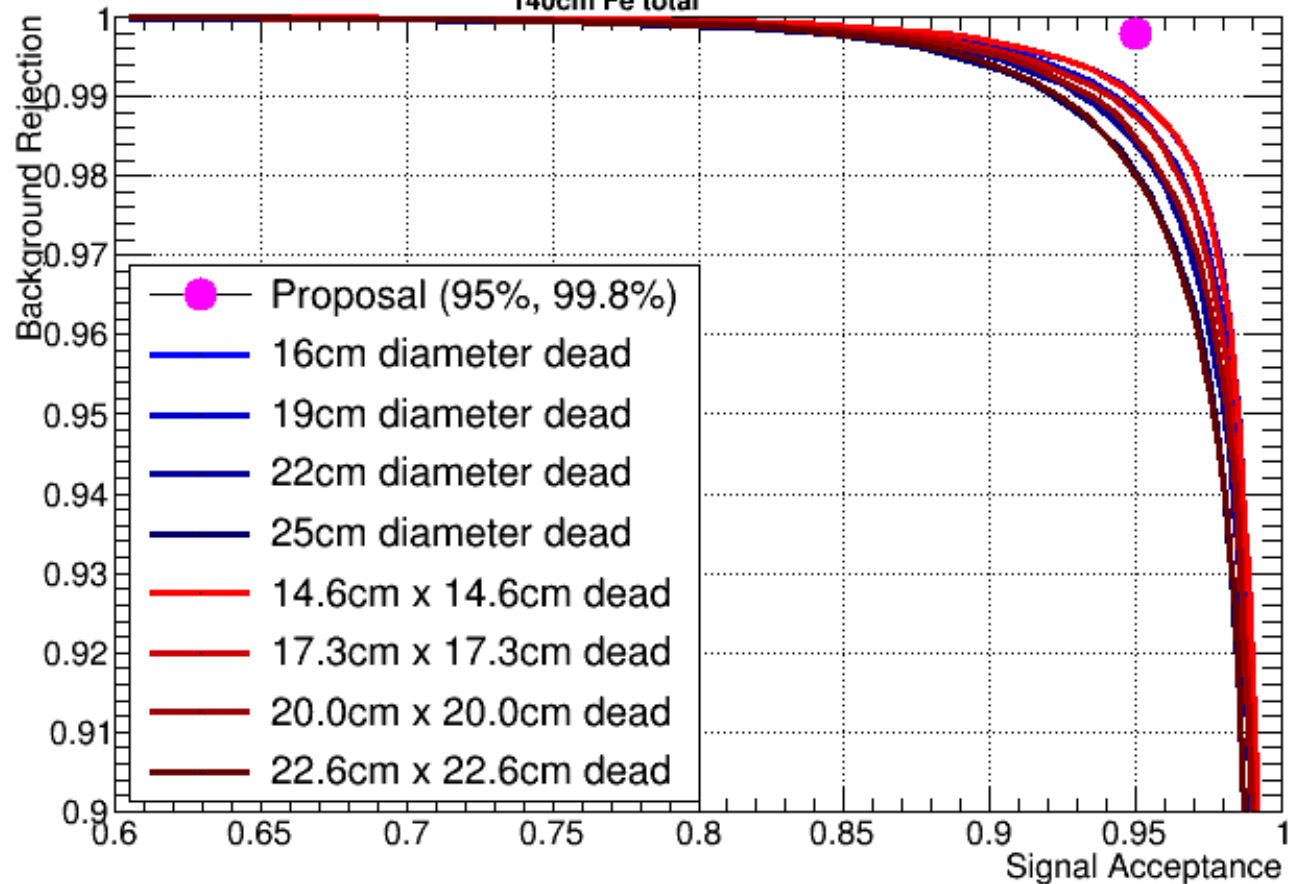
Round vs. Square Beam Hole

FMWPC Dead Region

June 27, 2017 DL
git revision #1147c74

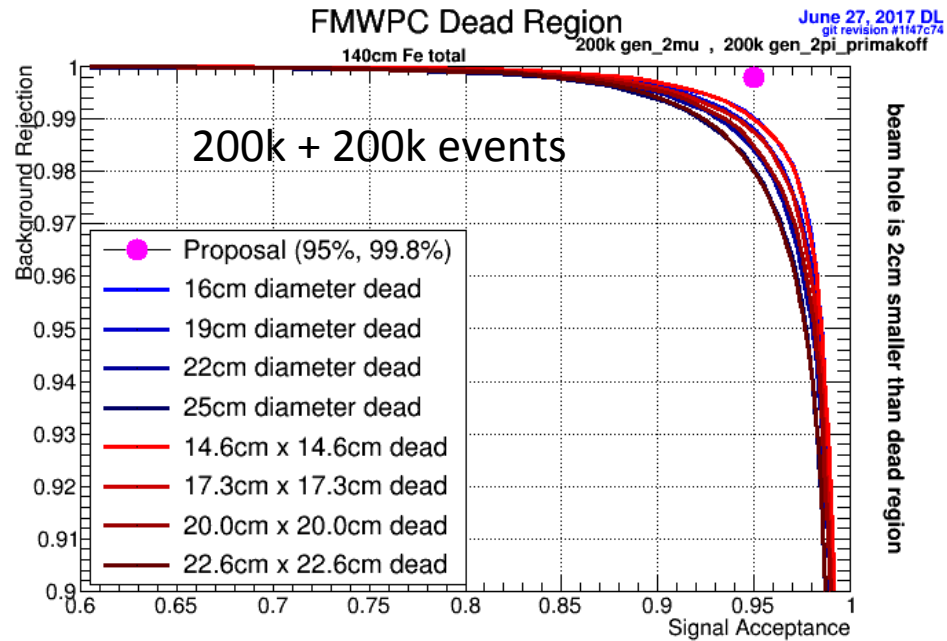
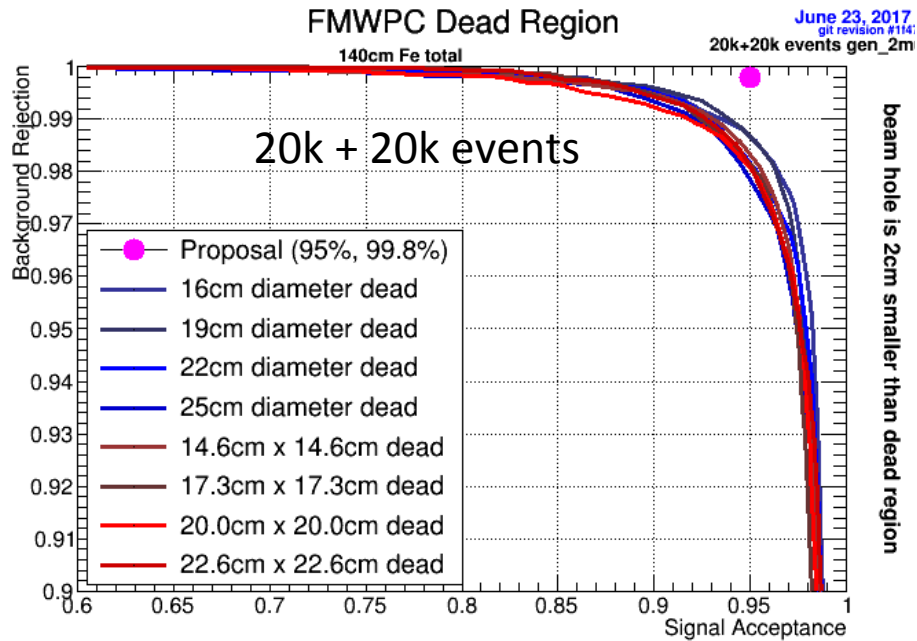
140cm Fe total

200k gen_2mu , 200k gen_2pi_primakoff



- Sizes chosen to match area
- 4 different sizes tested
- Dead region extends 2cm beyond beam hole in iron

20k -> 200k

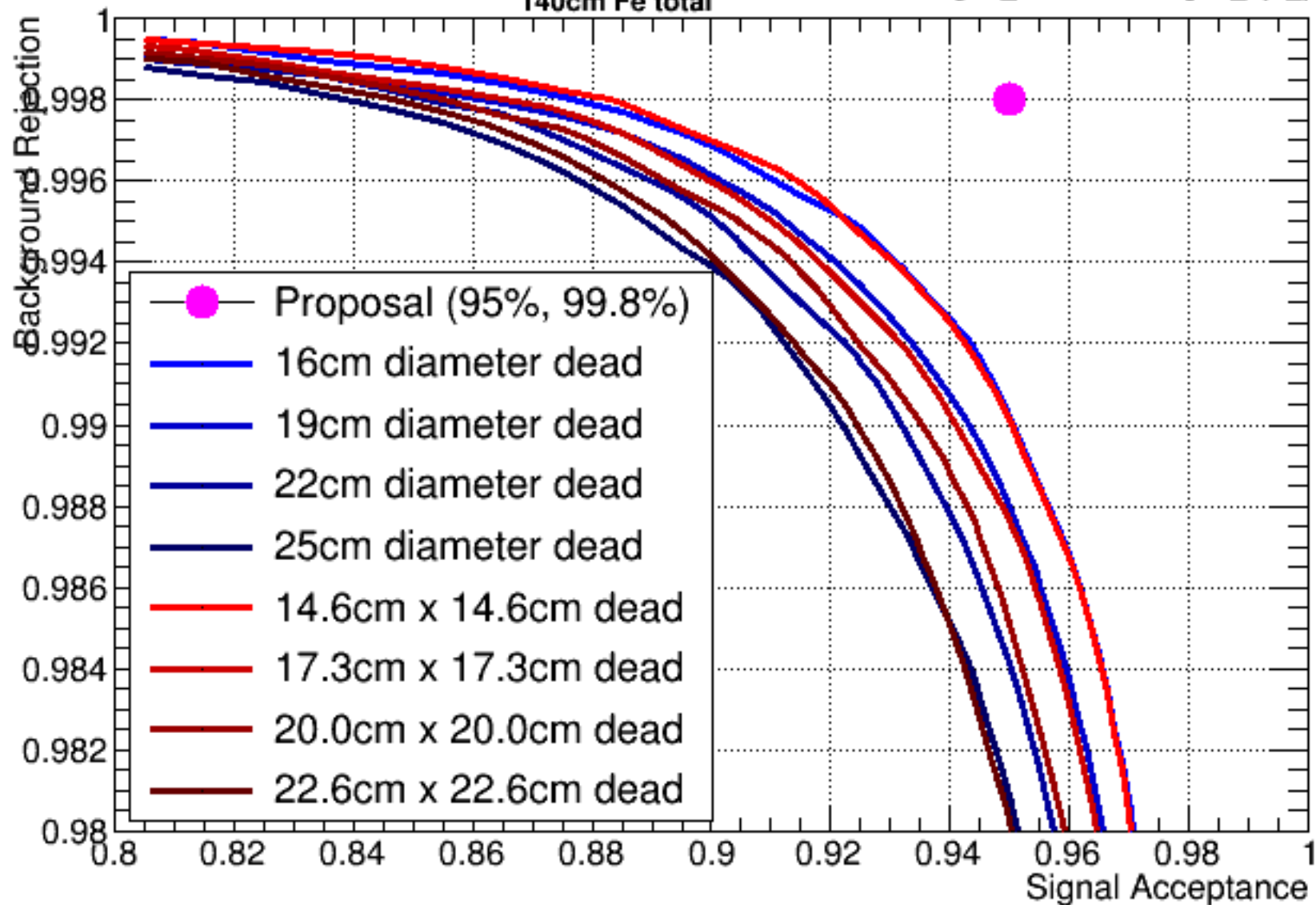


FMWPC Dead Region

June 25, 2017 DL
git revision #1147c74

140cm Fe total

200k gen_2mu , 200k gen_2pi_primakoff

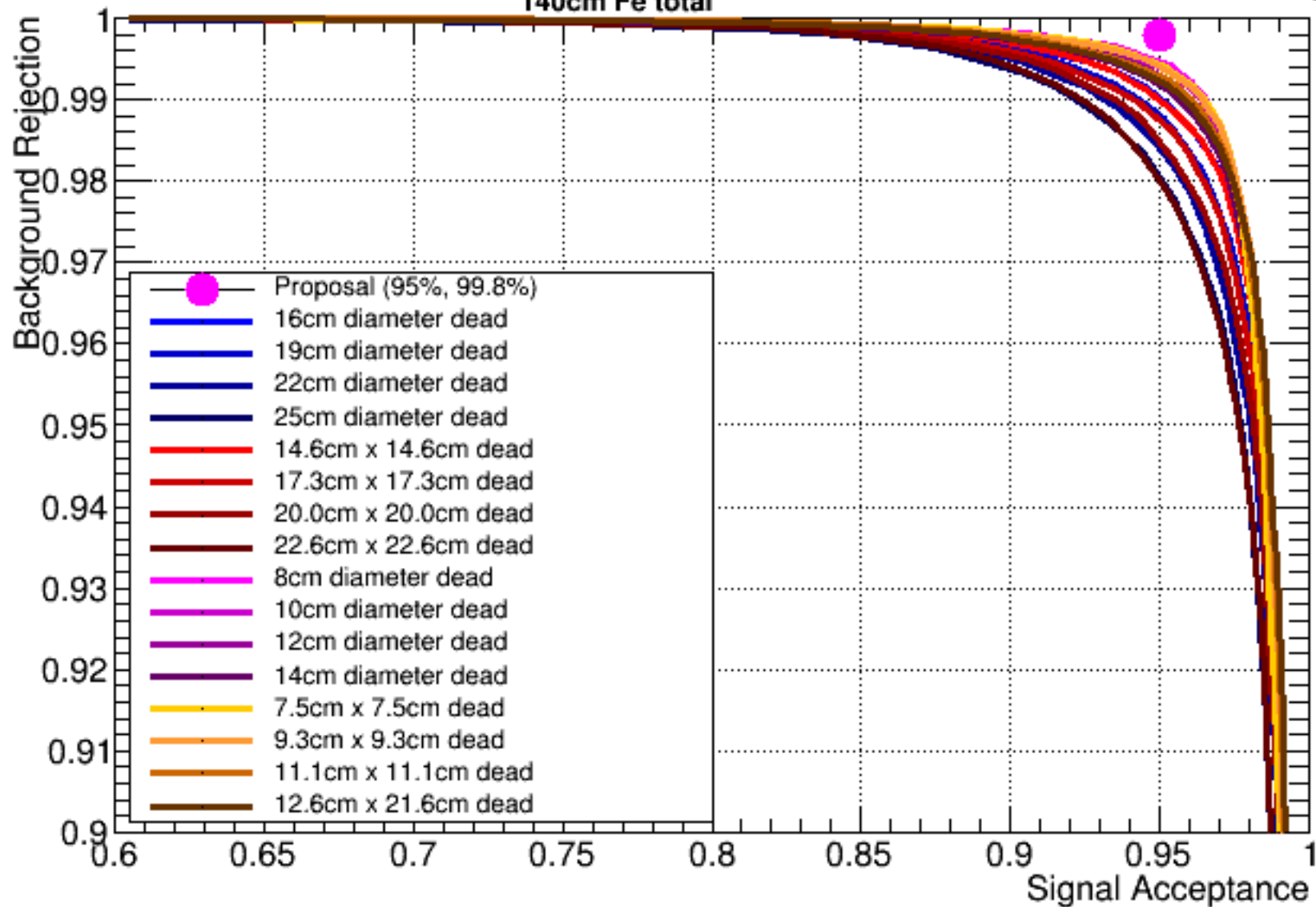


FMWPC Dead Region

June 25, 2017 DL
git revision #1147c74

20k+20k events gen_2mu

140cm Fe total

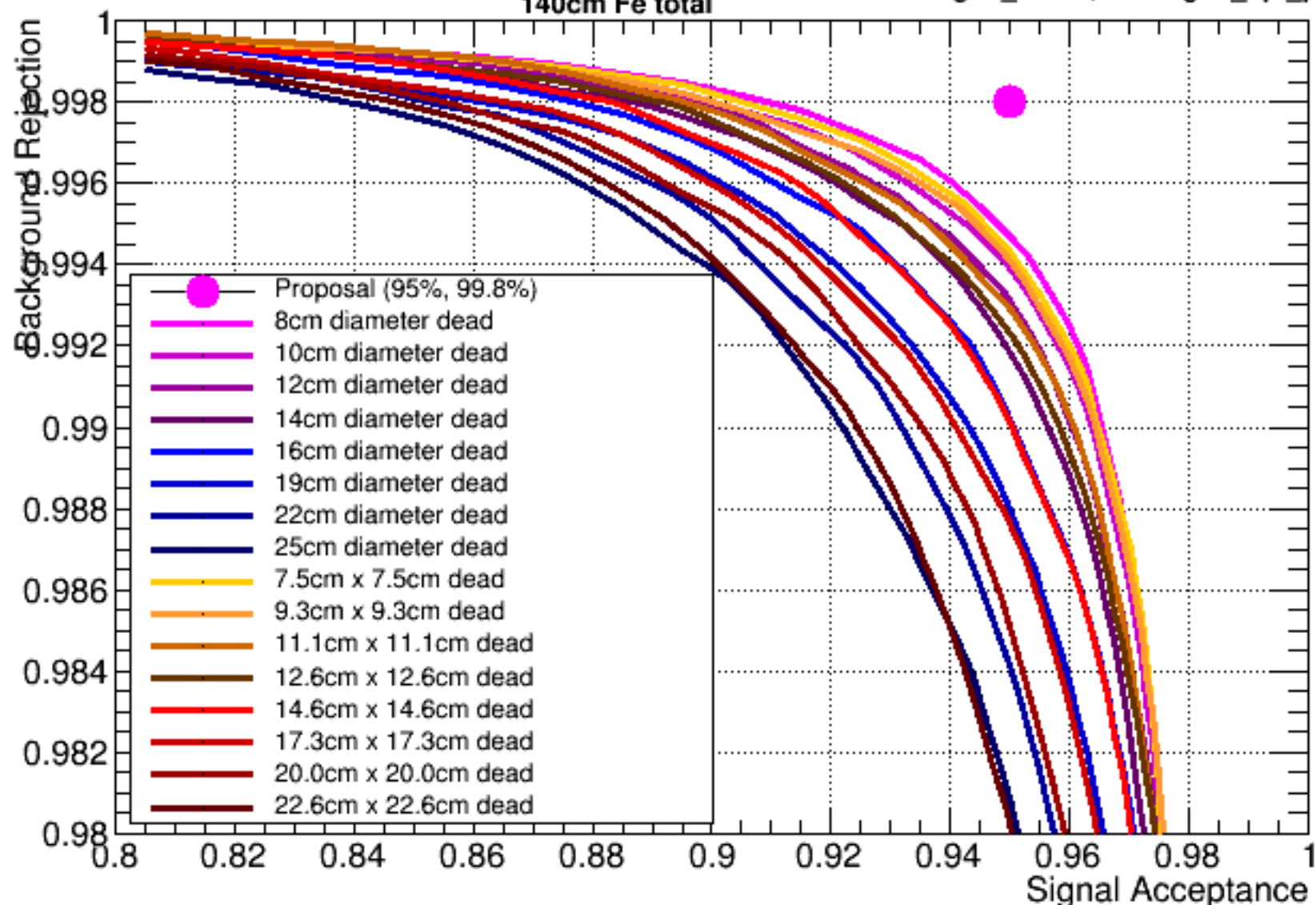


FMWPC Dead Region

June 25, 2017 DL
git revision #1147c74

140cm Fe total

200k gen_2mu , 200k gen_2pi_primakoff



8cm dead region (square)

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FMWPC hit scaled down by factor of ~10

