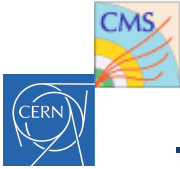




# pixel phase1

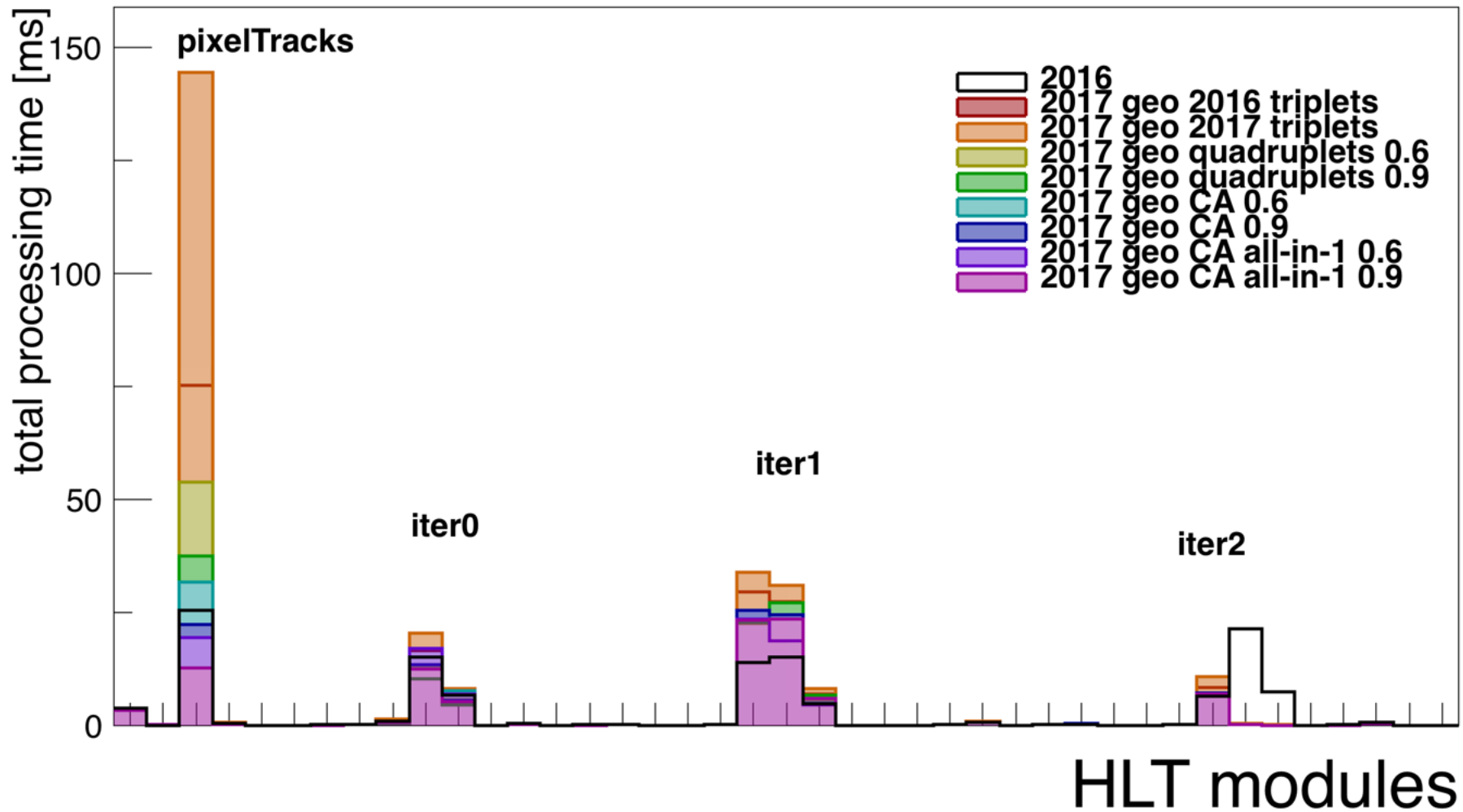
# tracking@HLT

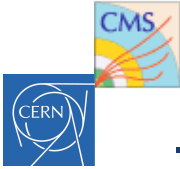
mia tosi  
2016, Sep 2<sup>nd</sup>



# pixelTracks tuning: timing (I)

CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Preliminary

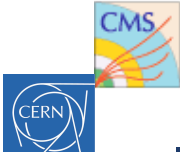




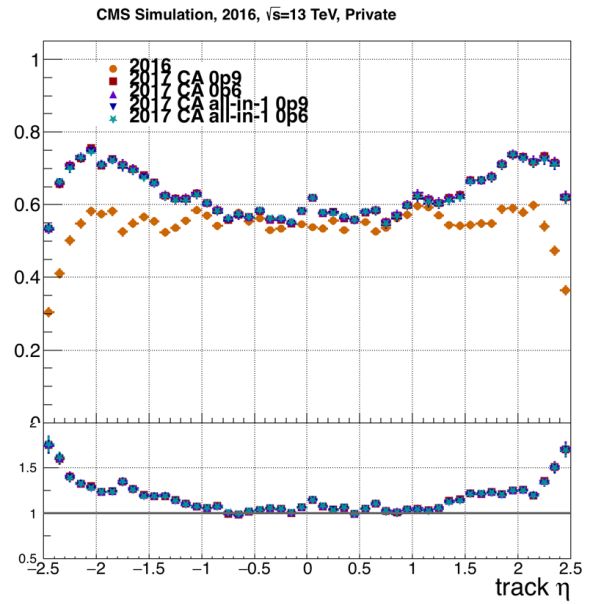
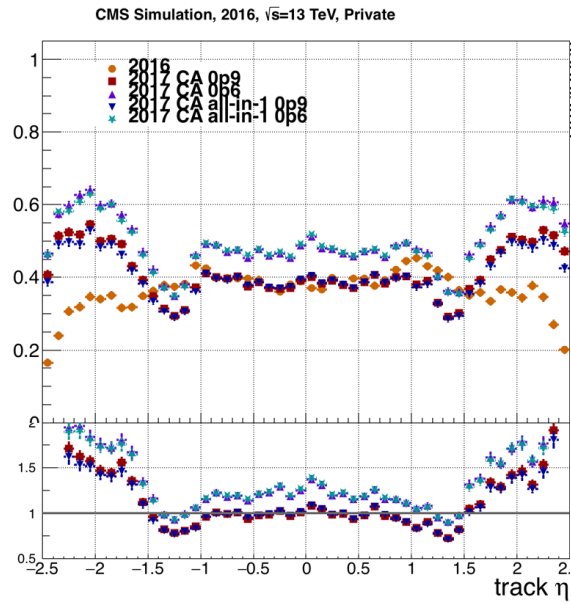
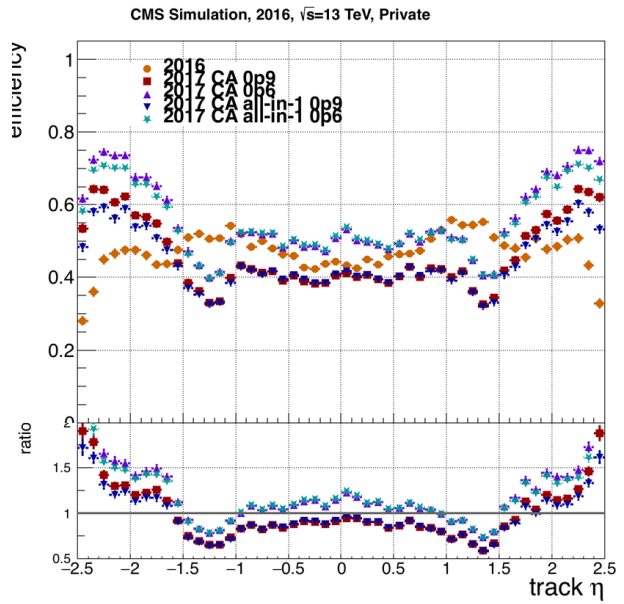
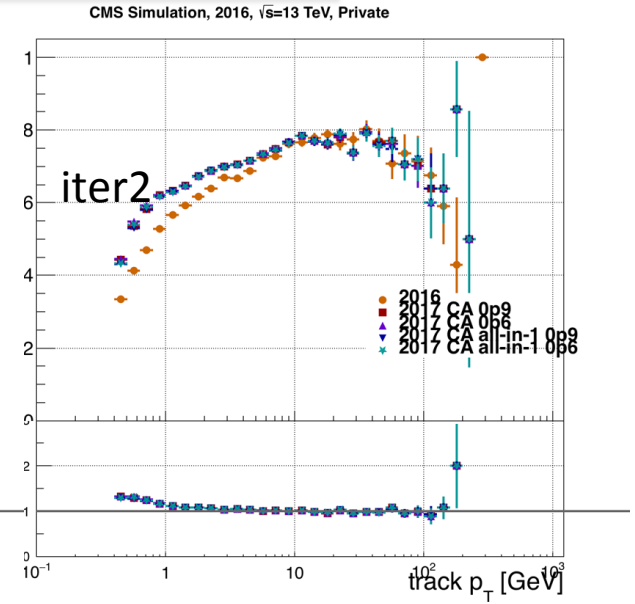
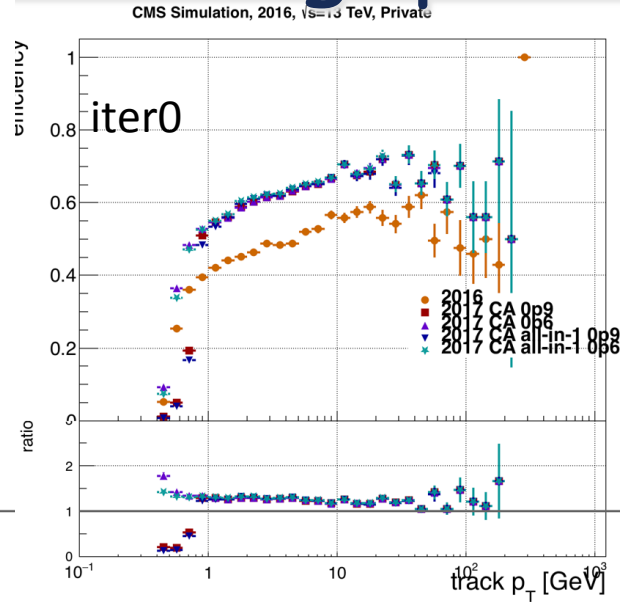
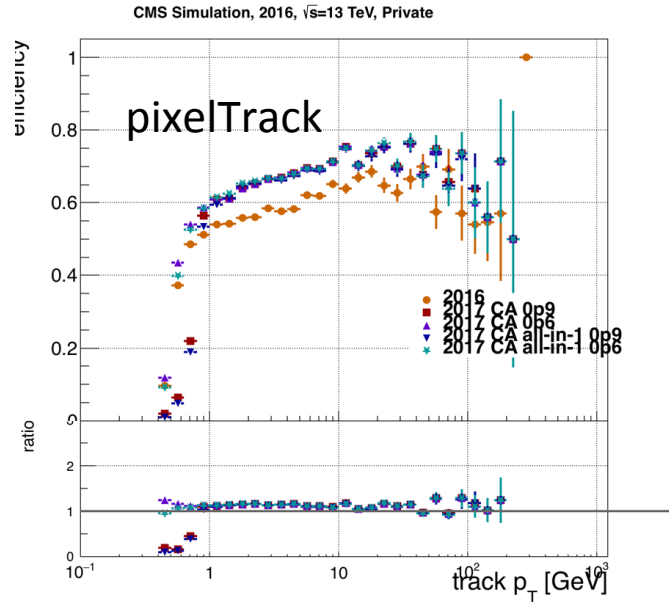
# pixelTracks tuning: timing (II)

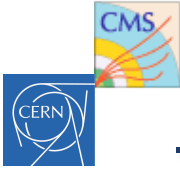
	average timing / event [ms]		pixelTracks fraction [%]	RegionPSet
	all tracking	pixelTracks		
<b>2016</b>	172	25.4	14.8	2
<b>2017 geo 2016 triplets</b>	215	75.1	35	2
<b>2017 geo 2017 triplets</b>	302	144	47.8	2
<b>2017 geo quadruplets 0.6</b>	175	53.9	30.8	3
<b>2017 geo quadruplets 0.9</b>	159	37.4	23.5	1
<b>2017 geo CA 0.6</b>	156	31.7	20.3	3
<b>2017 geo CA 0.9</b>	148	22.4	15.1	1
<b>2017 geo CA all-in-1 0.6</b>	141	19.5	13.8	3
<b>2017 geo CA all-in-1 0.9</b>	133	12.6	9.5	1

	RegionPSet		
	1	2	3
originRadius	0.02	0.2	0.02
ptMin	0.9	0.9	0.6
nSigmaZ	4.0	24.0	4.0

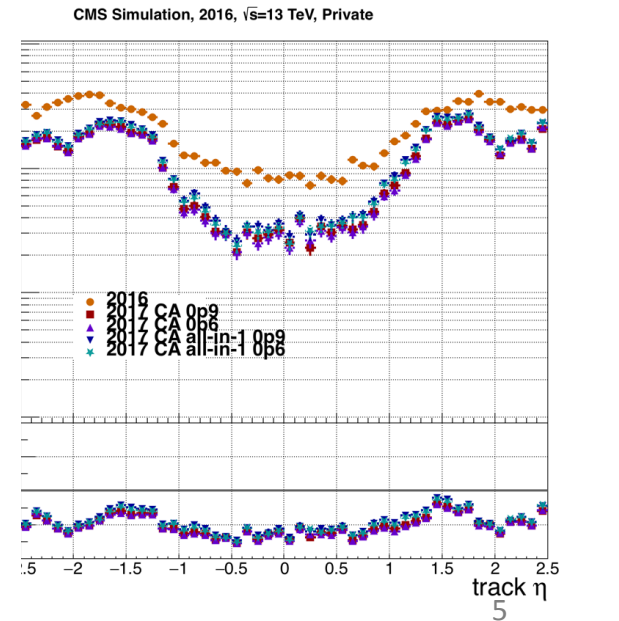
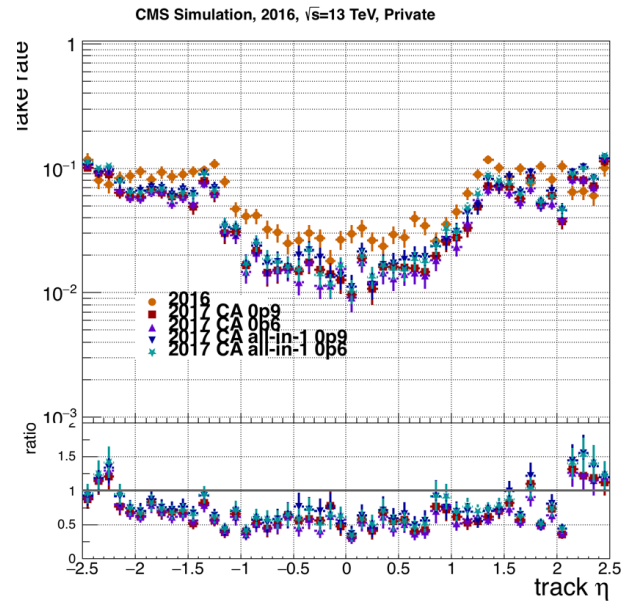
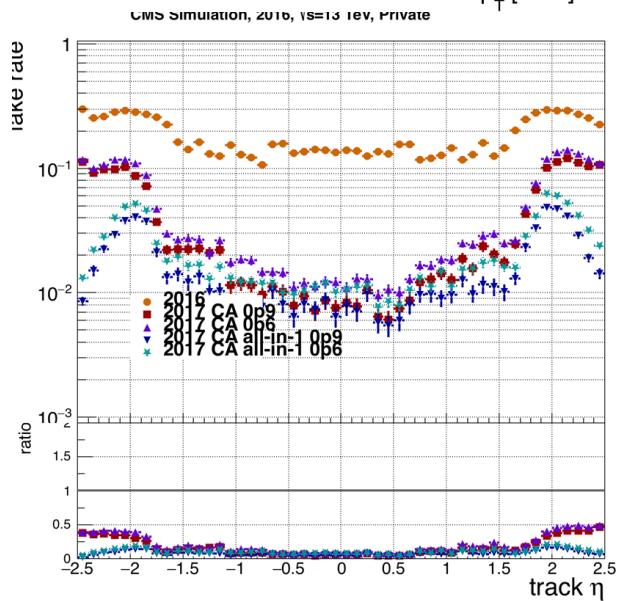
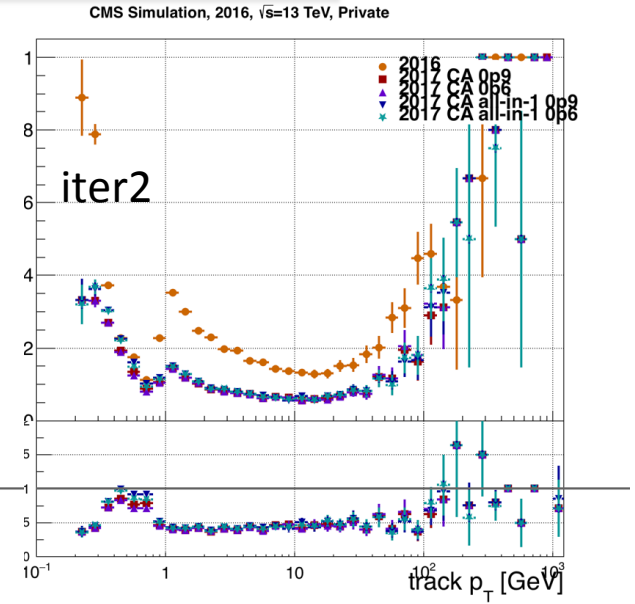
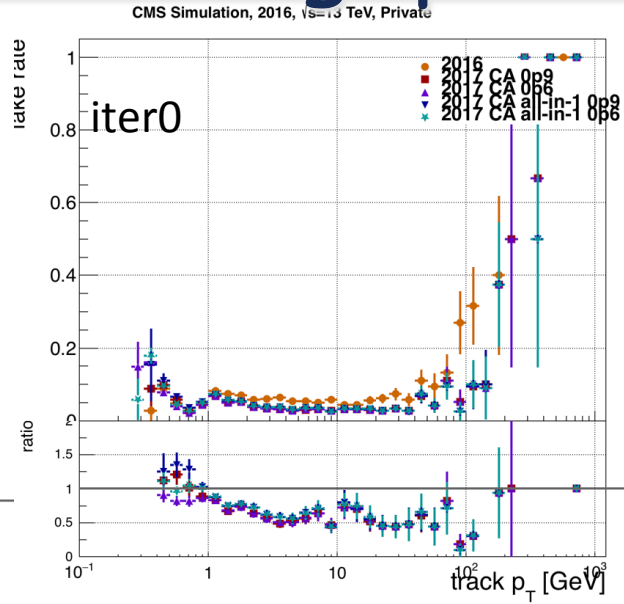
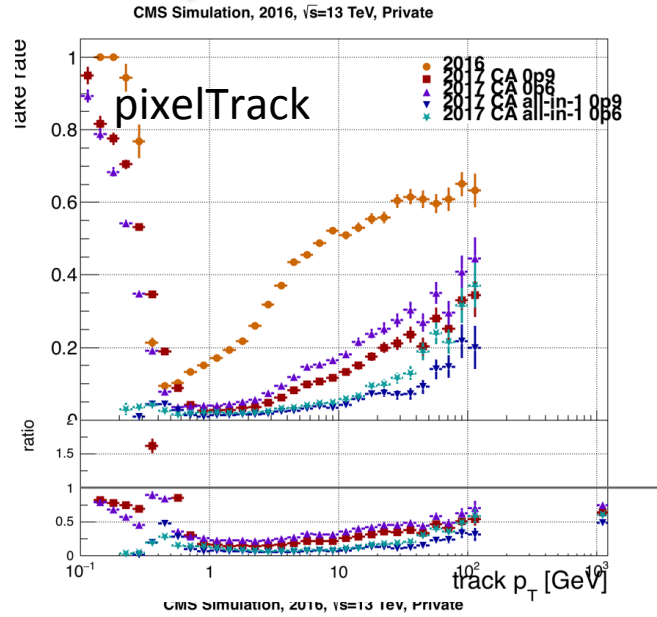


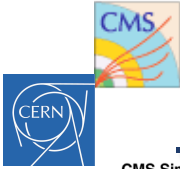
# pixelTracks tuning: performance





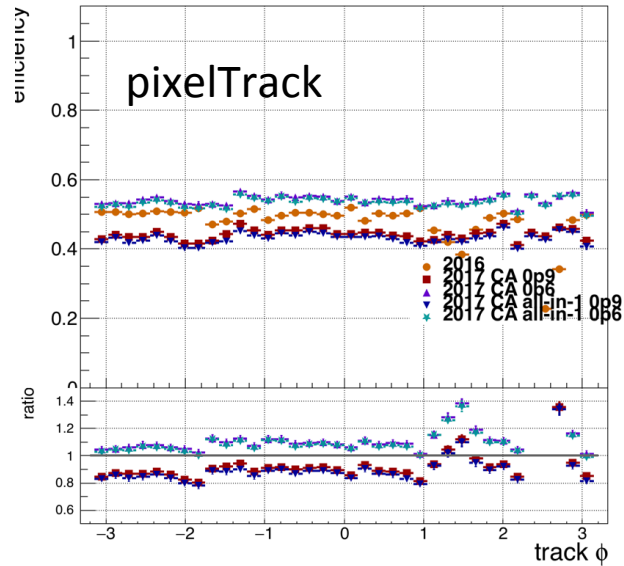
# pixelTracks tuning: performance



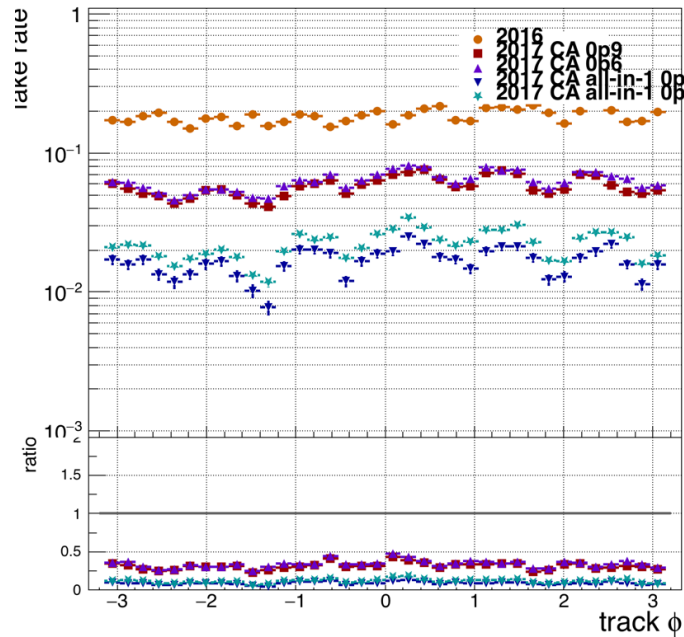


# pixelTracks tuning: performance

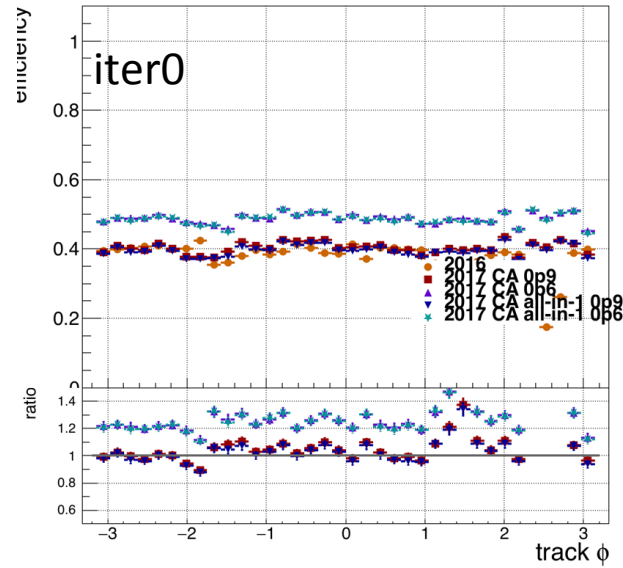
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



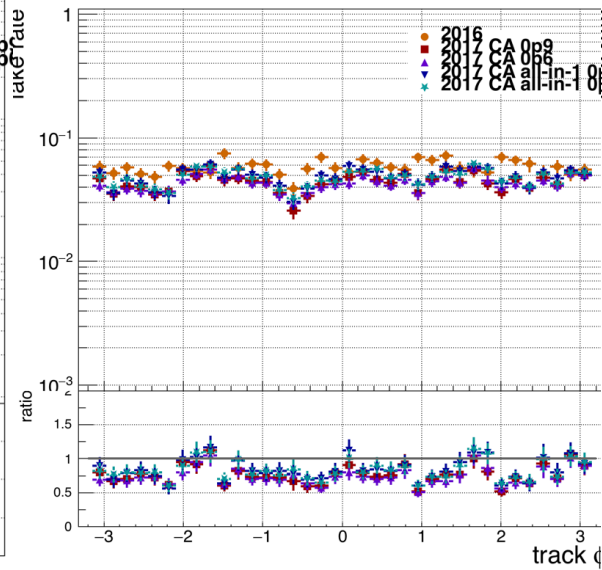
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



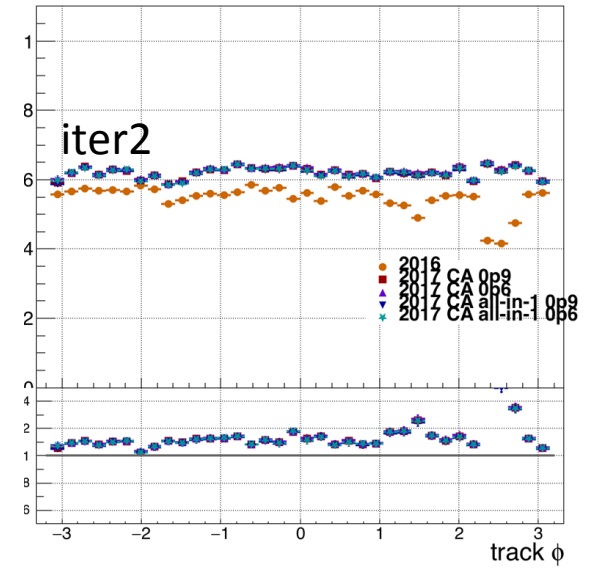
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



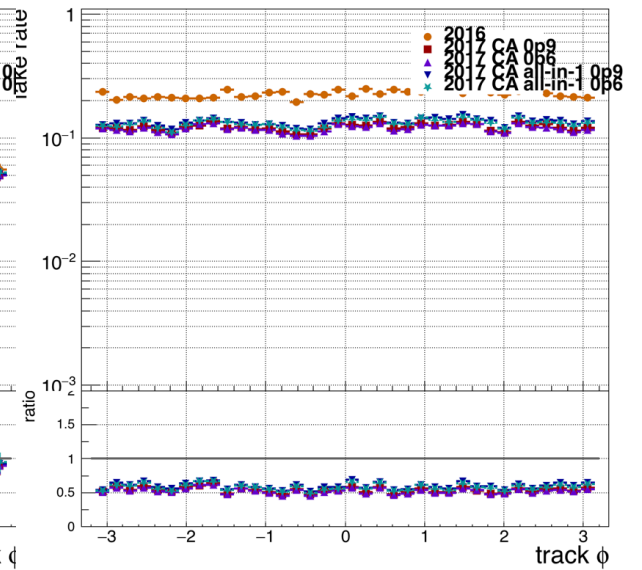
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private

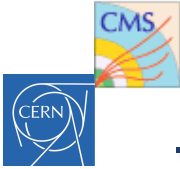


CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private

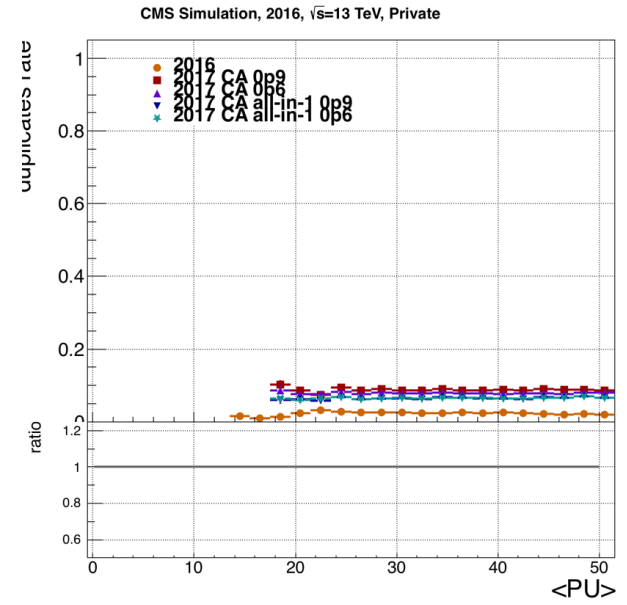
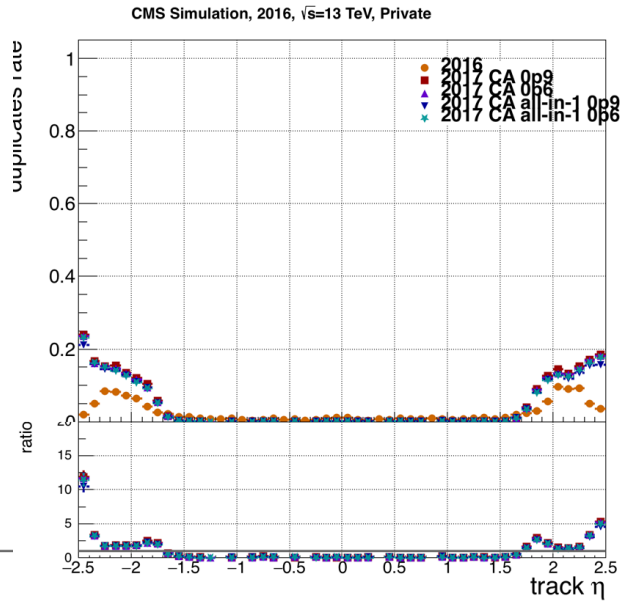
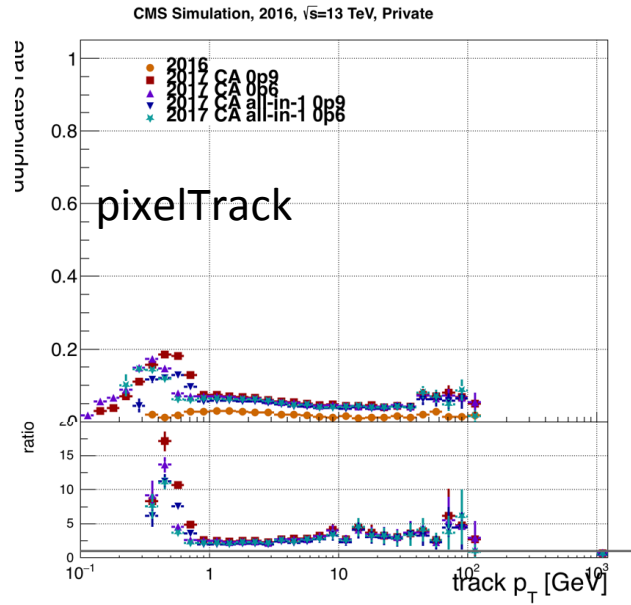


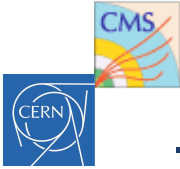
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



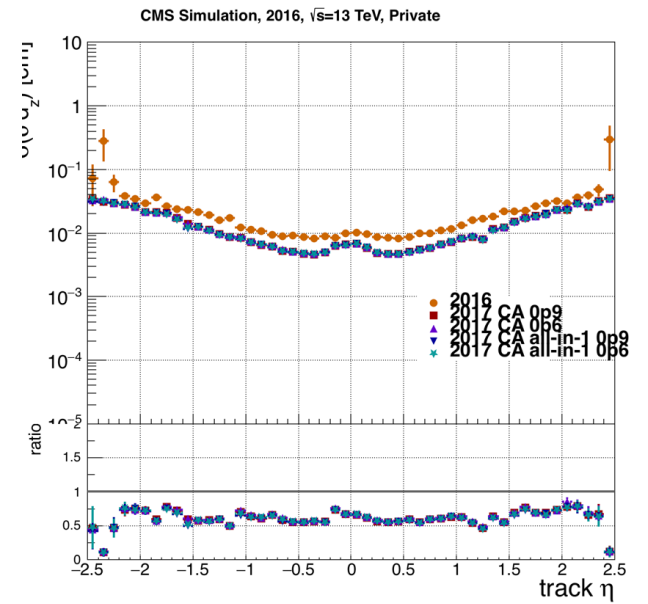
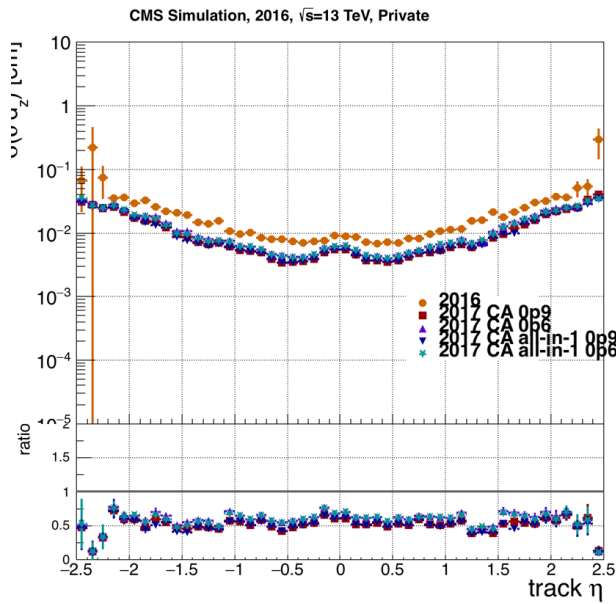
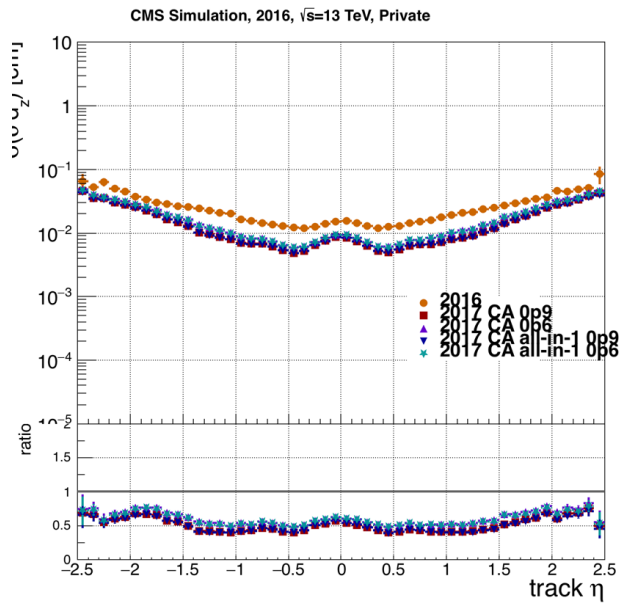
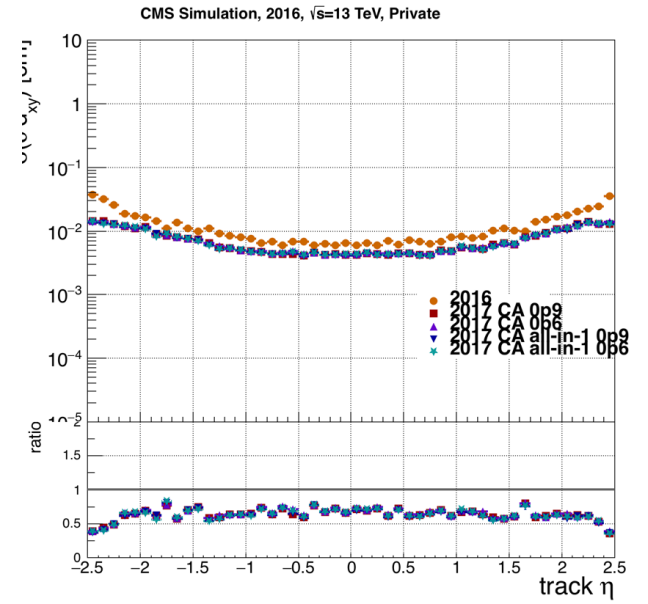
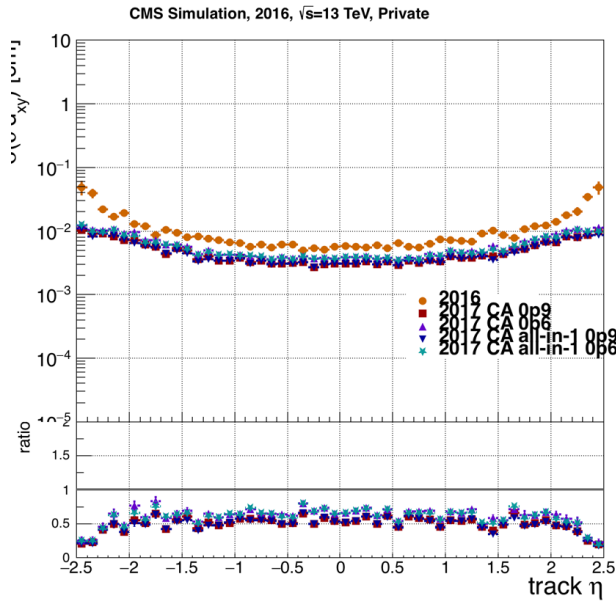
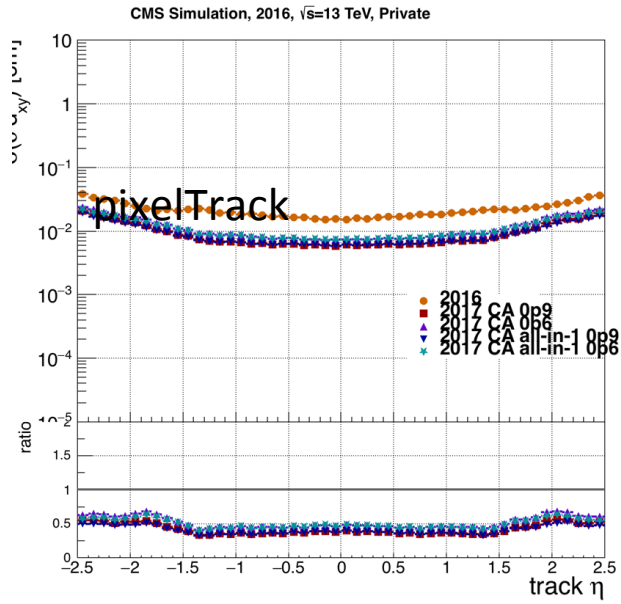


# pixelTracks tuning: performance

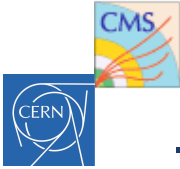




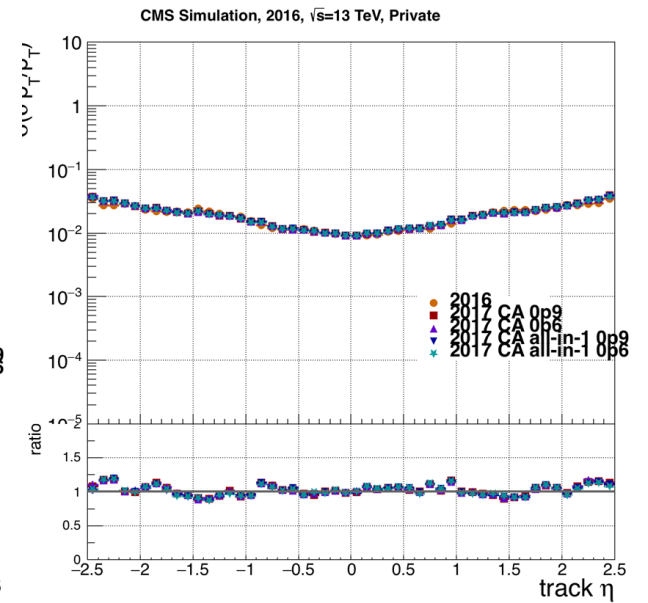
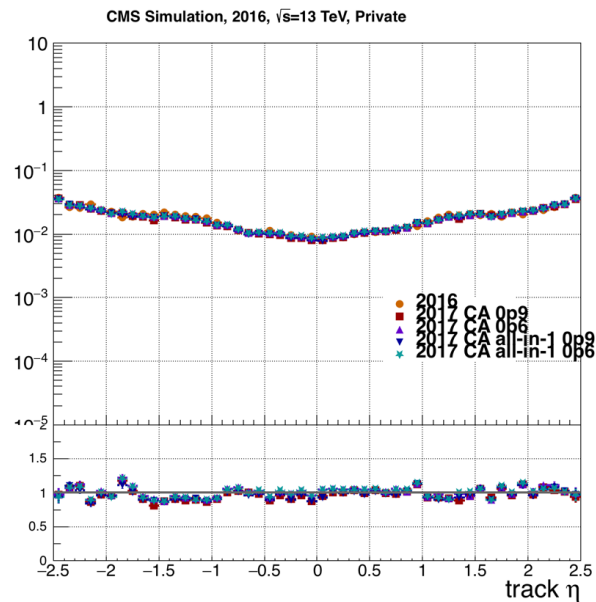
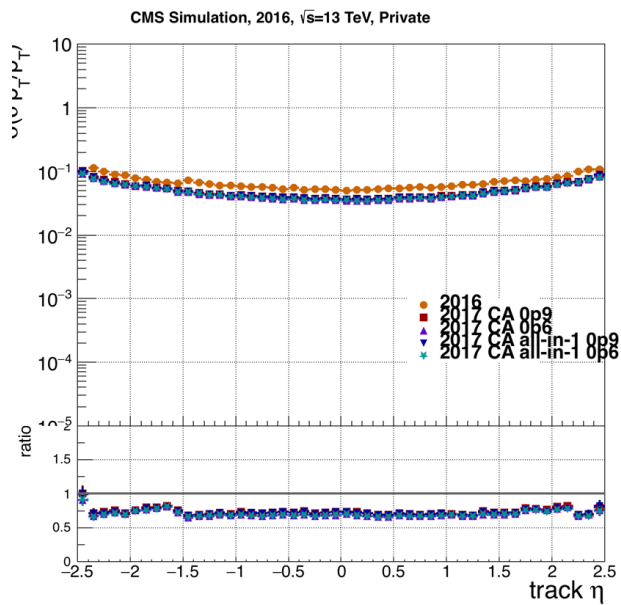
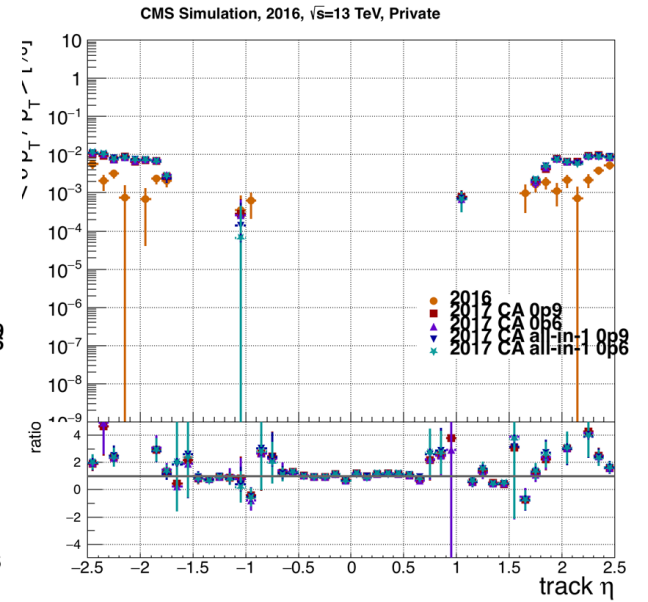
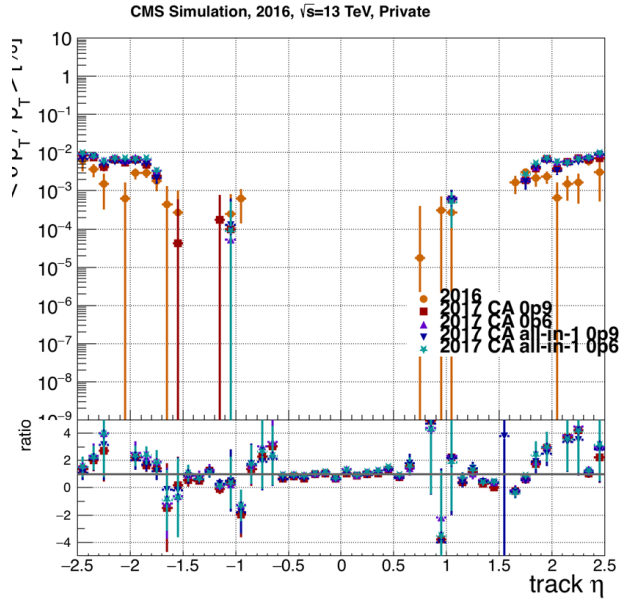
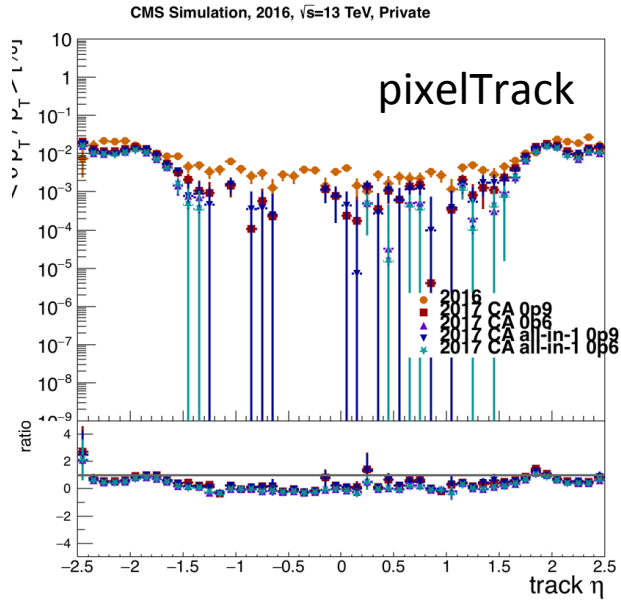
# pixelTracks tuning: performance

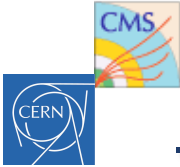






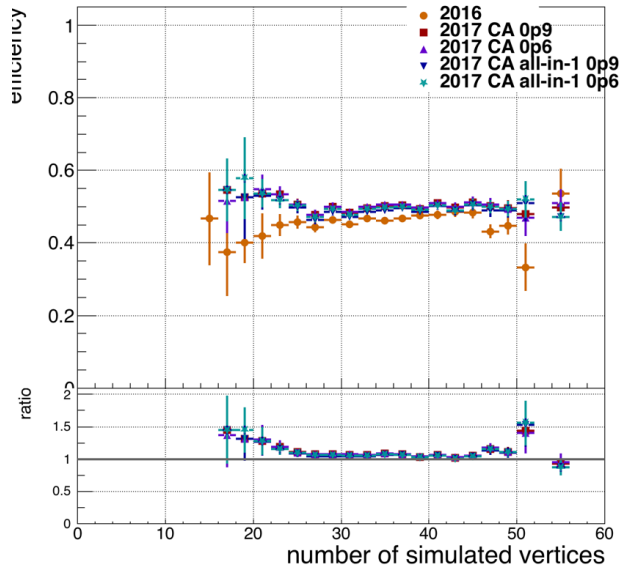
# pixelTracks tuning: performance



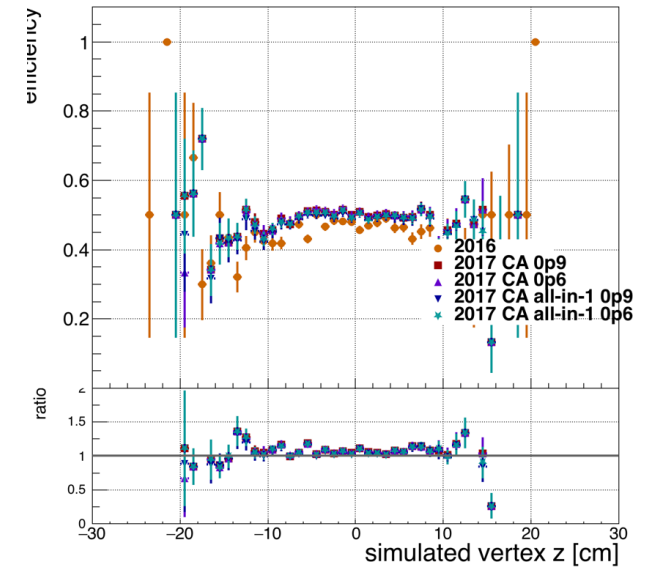


# pixelTracks tuning: performance

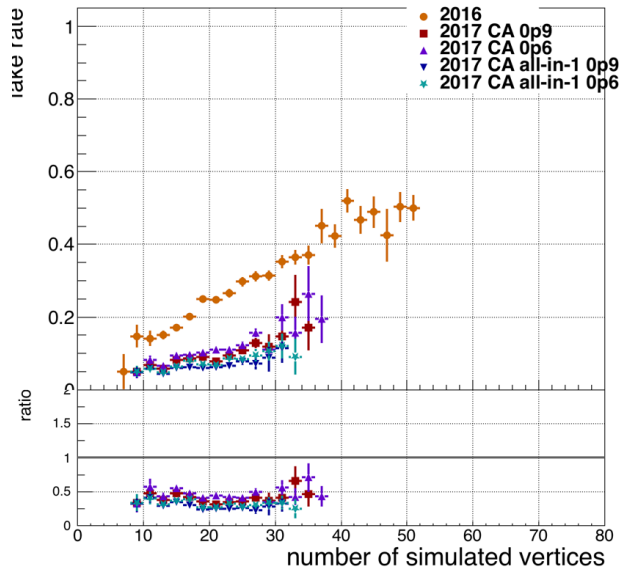
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



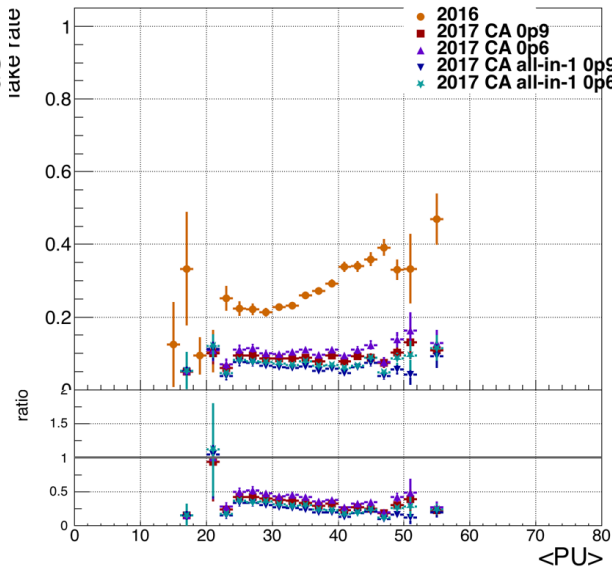
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



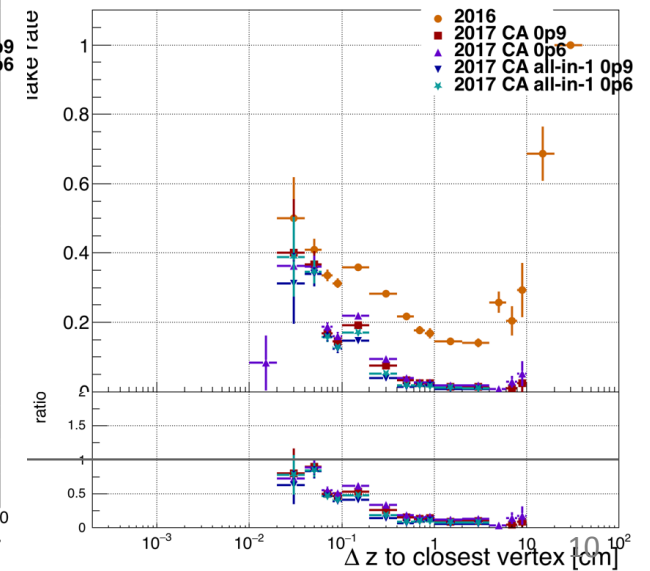
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private

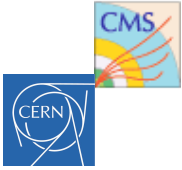


CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



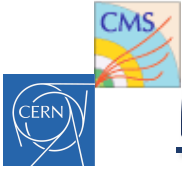
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private





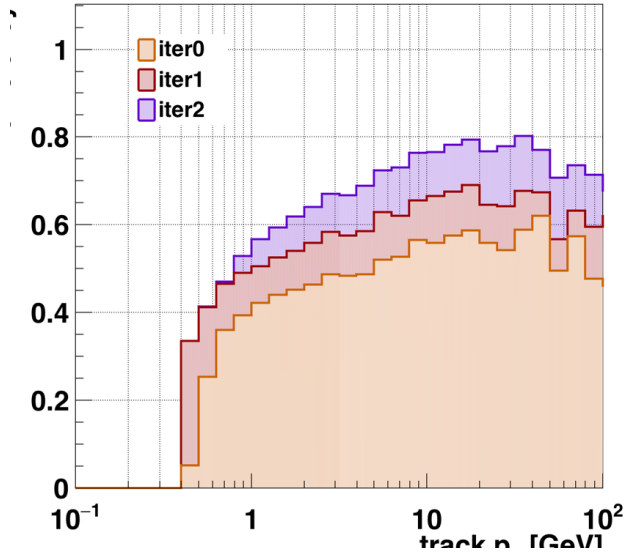
BACKUP



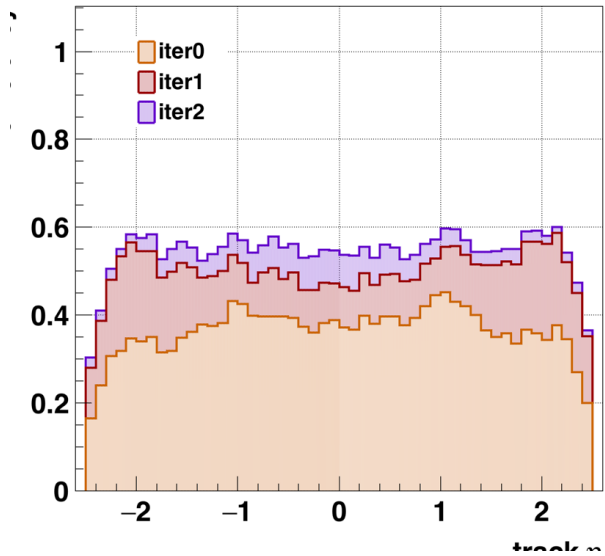


# Performance 2016

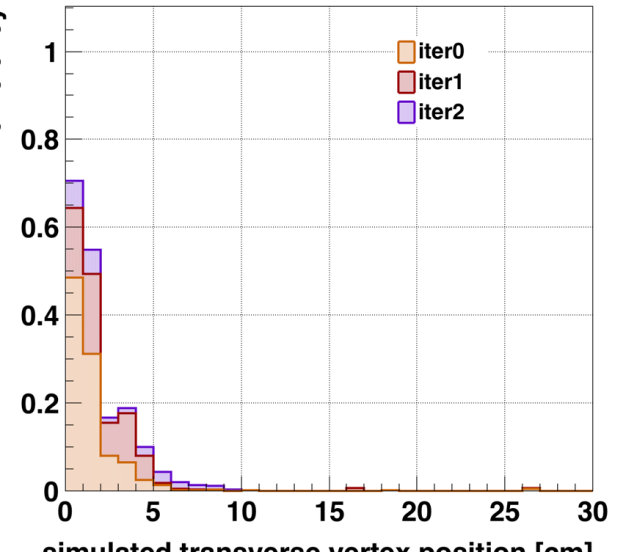
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



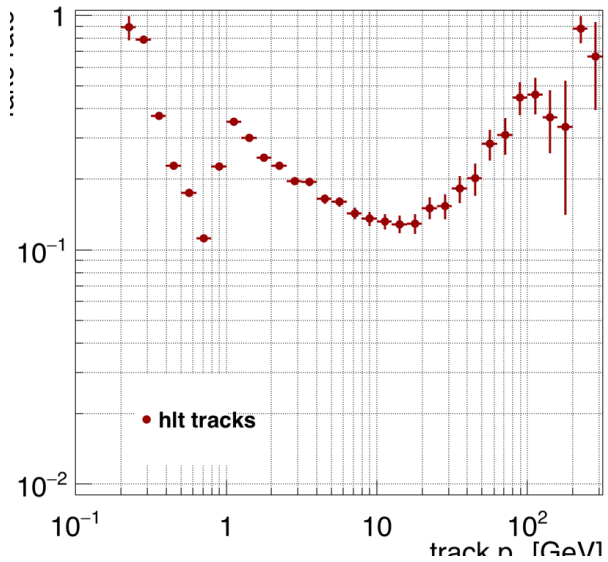
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



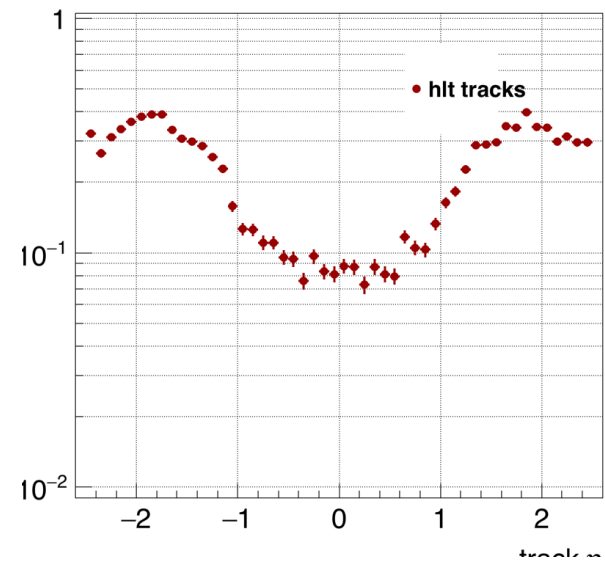
CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



CMS Simulation, 2016,  $\sqrt{s}=13$  TeV, Private



2016