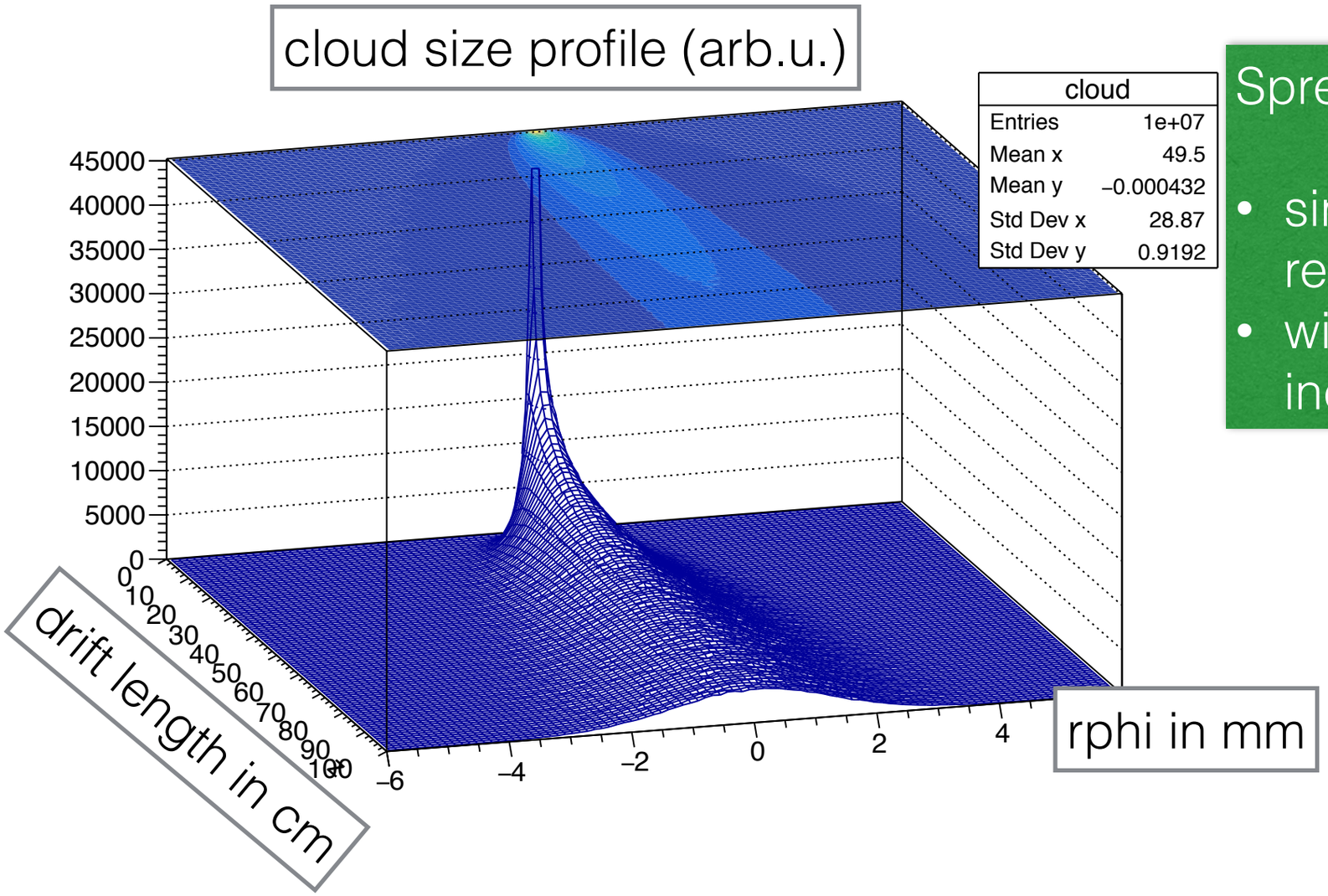
Update of Simulation of Gas Response to Passing Particles in sPHENIX TPC MonteCarlo



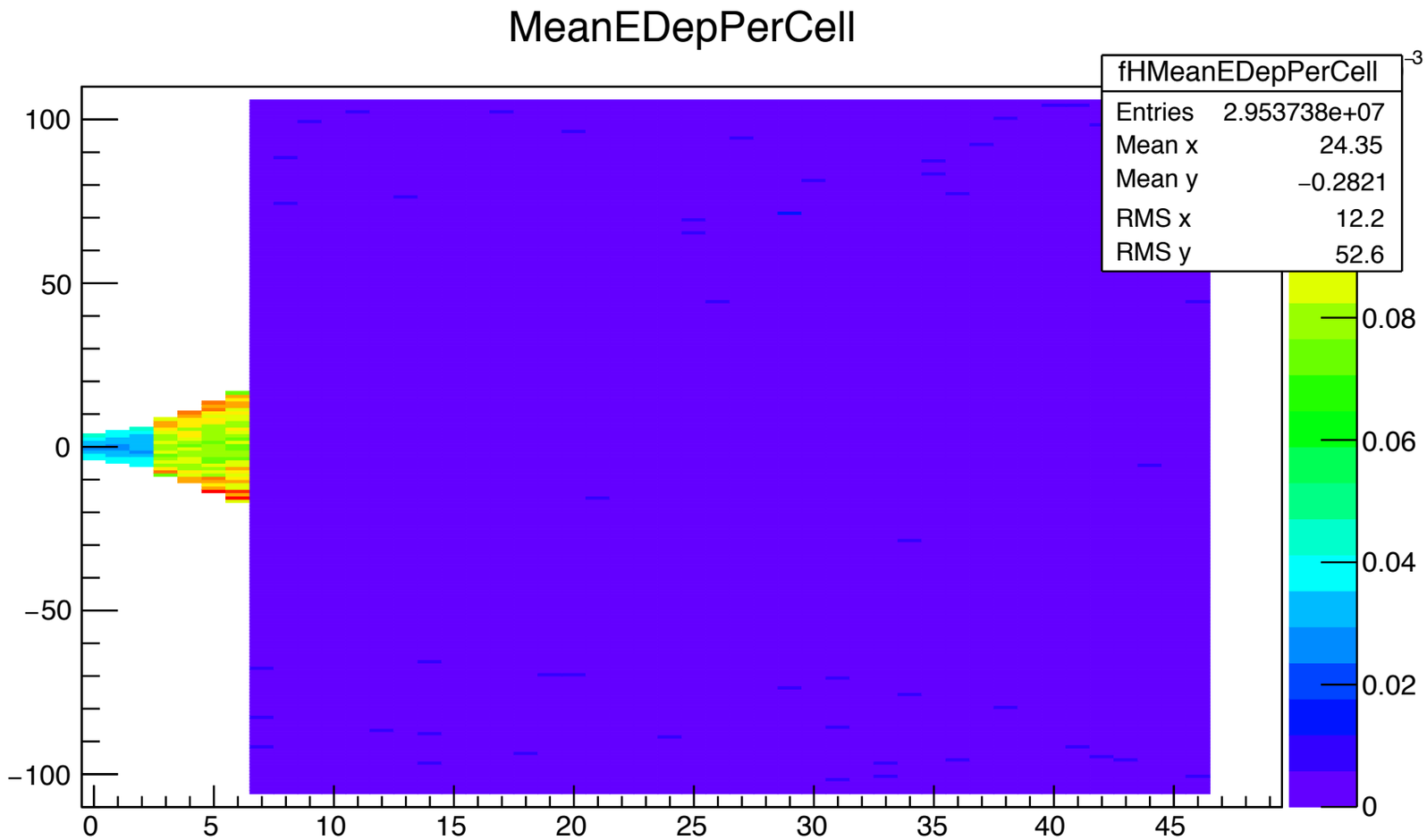
Spread over less than ~5 pads in rphi

- single pad for production close to readout plane
- wider spread as drift length increases

Simulation in PHG4CyllinderCellTPCReco

0.001	0.004	0.012	0.028	0.055	0.087	0.111	0.114	0.095	0.064	0.035	0.016	0.006	0.002	0.000
0.020	0.073	0.216	0.520	1.012	1.593	2.029	2.093	1.746	1.180	0.645	0.285	0.102	0.030	0.007
0.109	0.399	1.186	2.851	5.545	8.728	11.120	11.467	9.570	6.464	3.534	1.563	0.560	0.162	0.038
0.183	0.670	1.990	4.783	9.304	14.645	18.659	19.240	16.057	10.846	5.929	2.623	0.939	0.272	0.064
0.095	0.347	1.031	2.479	4.821	7.589	9.669	9.970	8.321	5.620	3.072	1.359	0.487	0.141	0.033
0.015	0.055	0.163	0.392	0.763	1.202	1.531	1.579	1.317	0.890	0.486	0.215	0.077	0.022	0.005
0.001	0.003	0.008	0.019	0.036	0.057	0.072	0.075	0.062	0.042	0.023	0.010	0.004	0.001	0.000

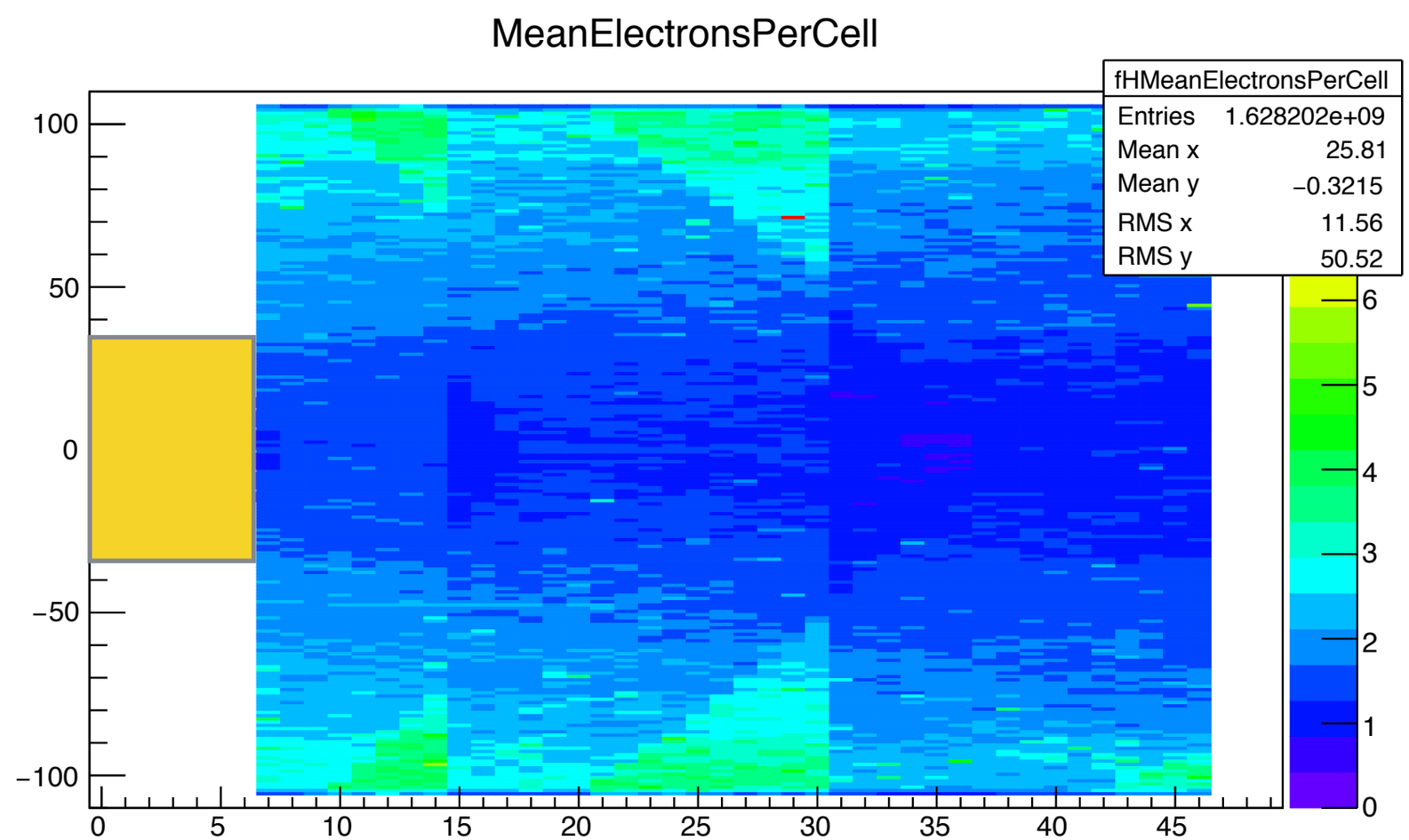
Fixed poissonian distribution to allow for more realistic spread



Mean Energy deposit from Central Hijing Events

Proportional to material budged

Binning:
1cm in Z
~1cm is Layer Width



Mean Density of electrons from Central Hijing Events

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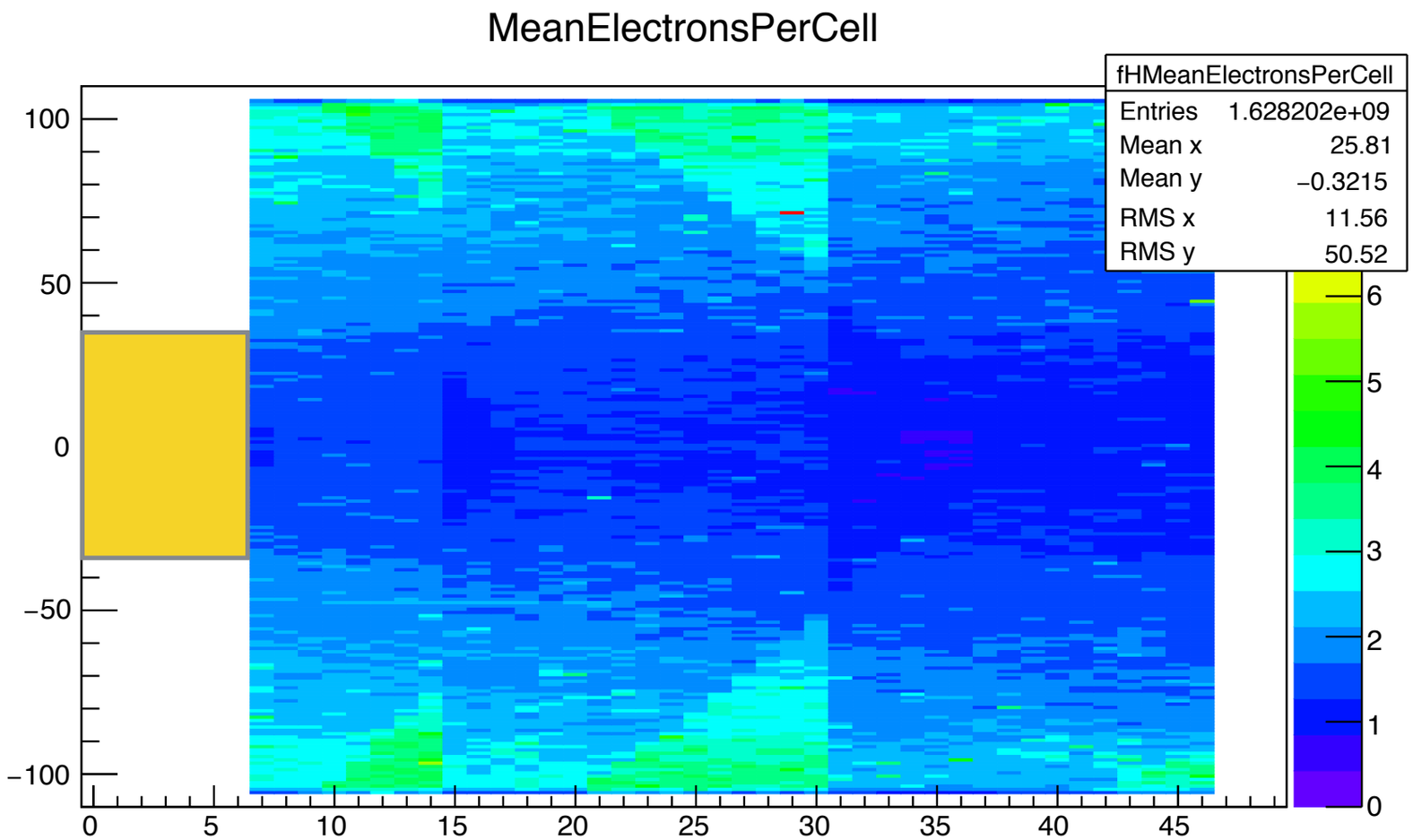
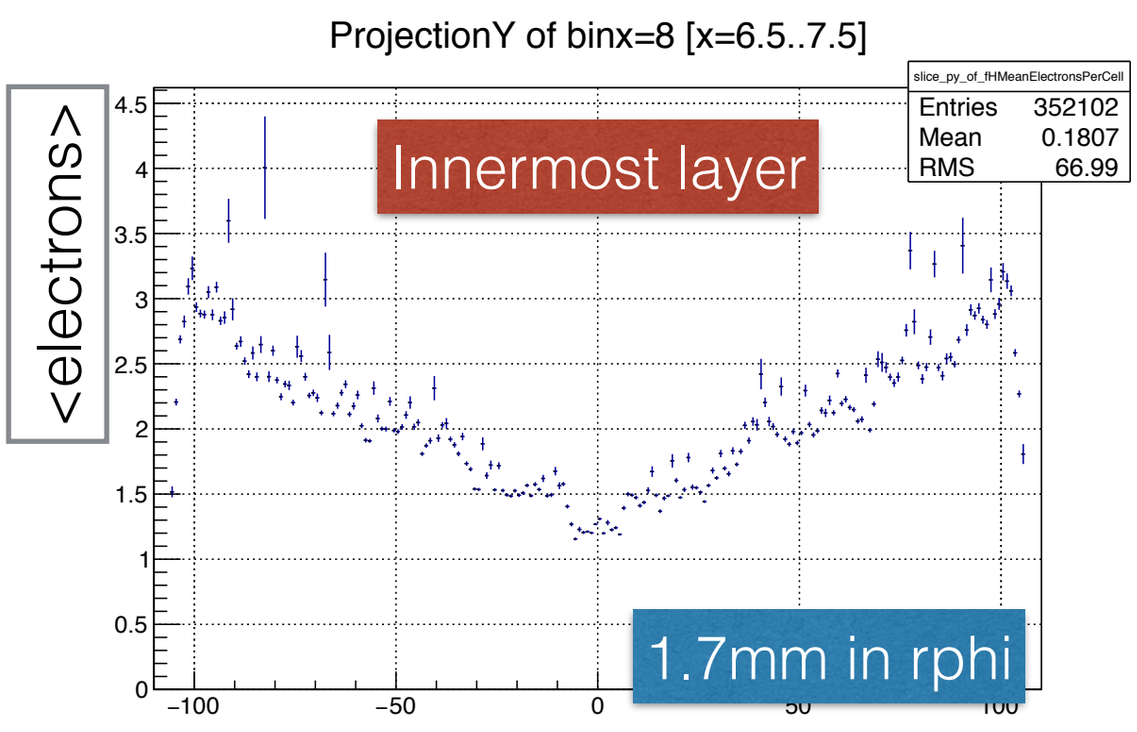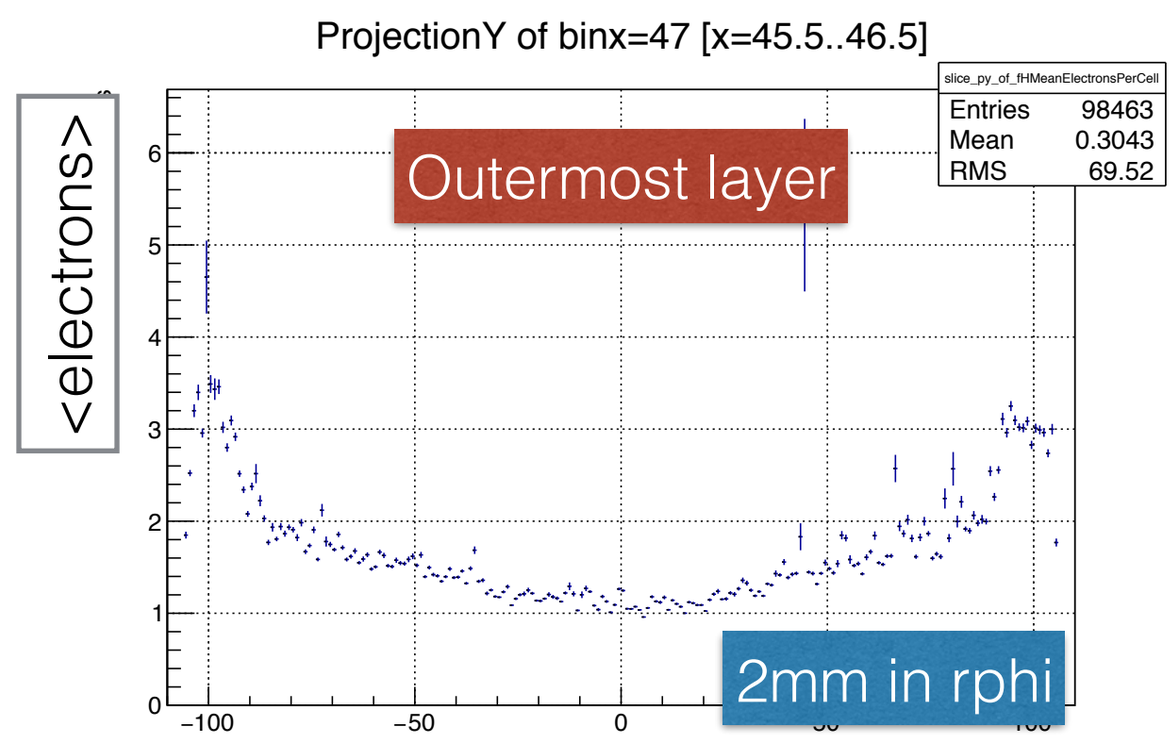
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