



University
of Regina

LTSep iterations results (first look)

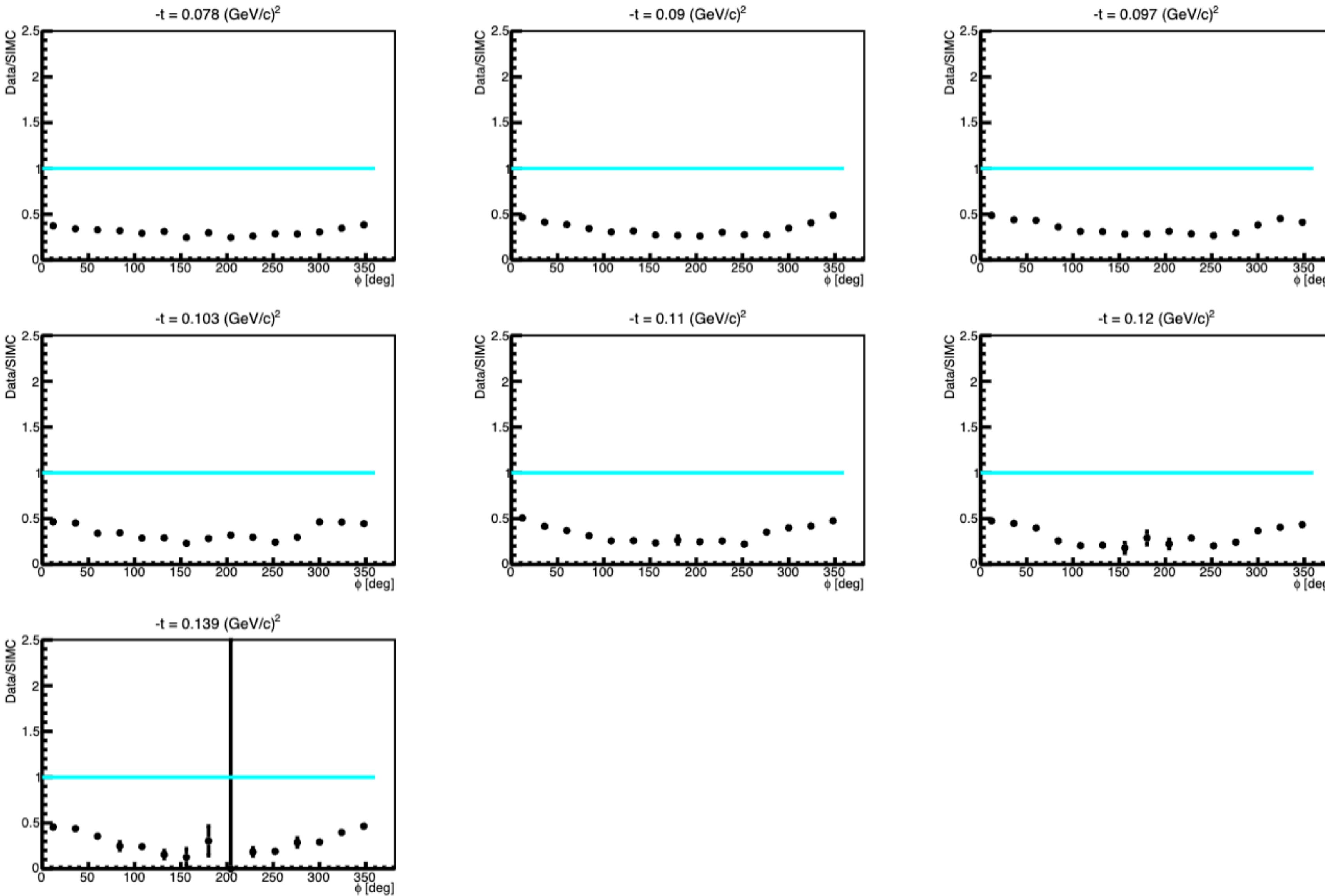
Abdennacer Hamdi

KaonLT Meeting
2025/07/31

Initial parameters

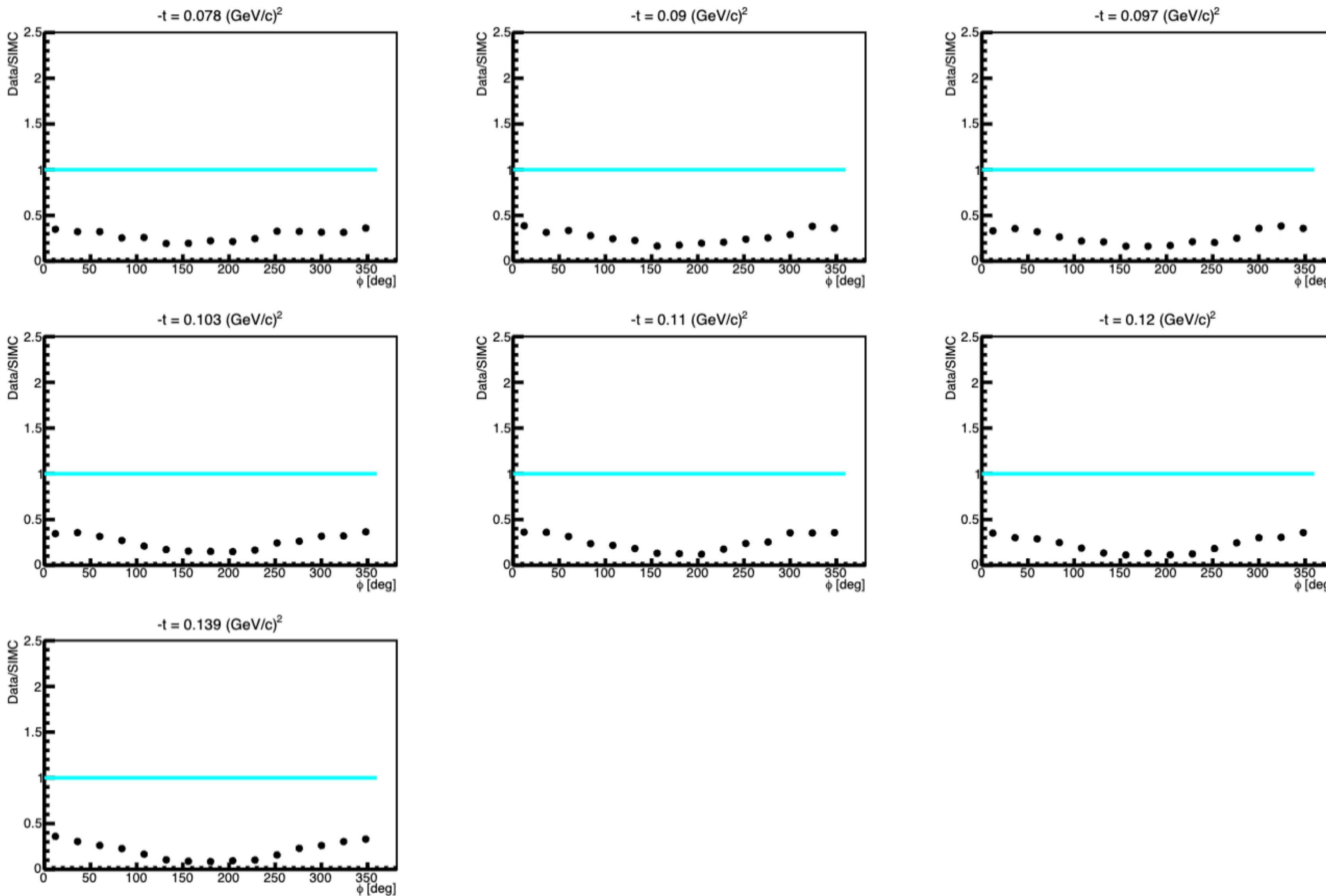
Data/SIMC Ratios

Low ϵ



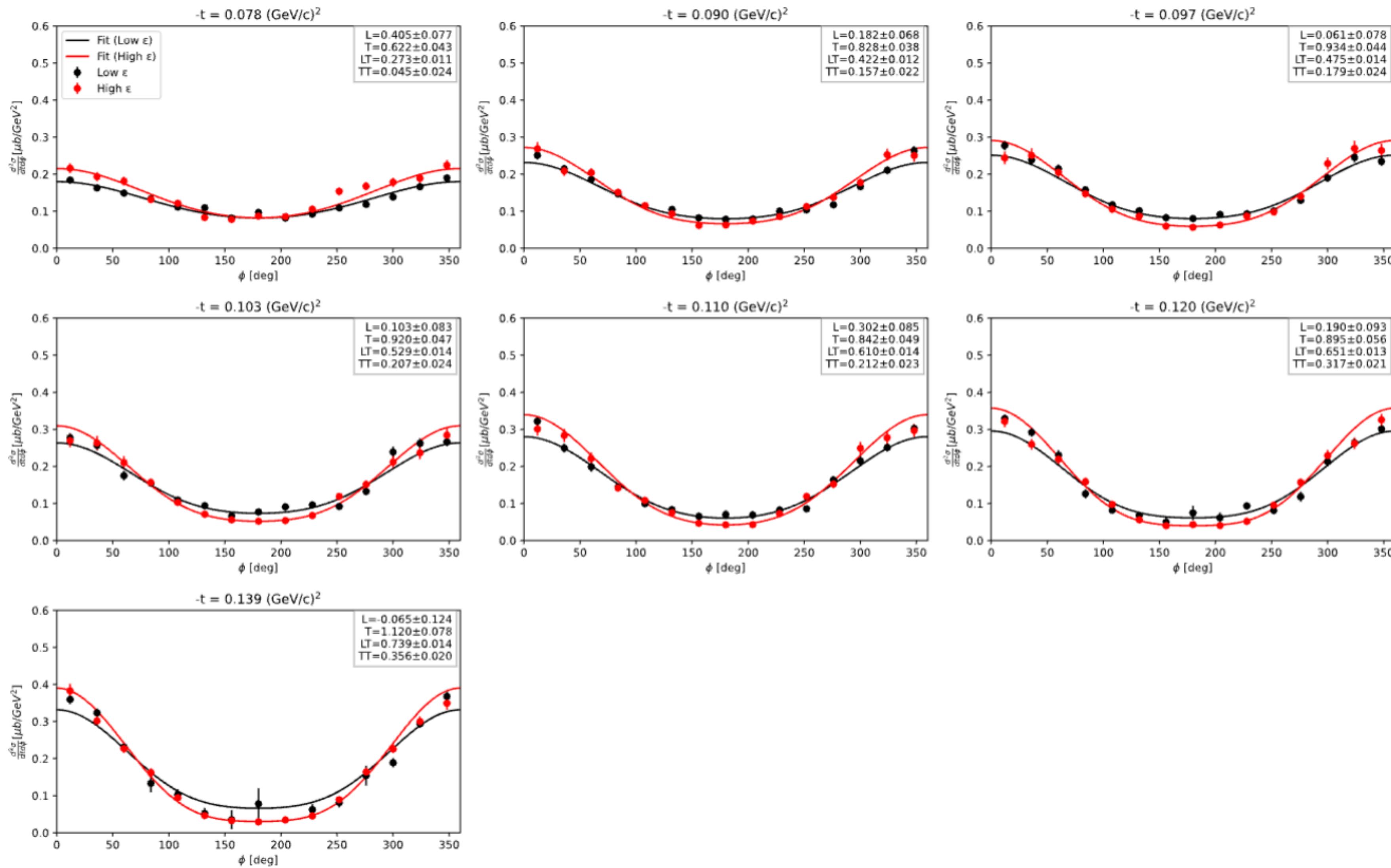
Data/SIMC Ratios

High ϵ



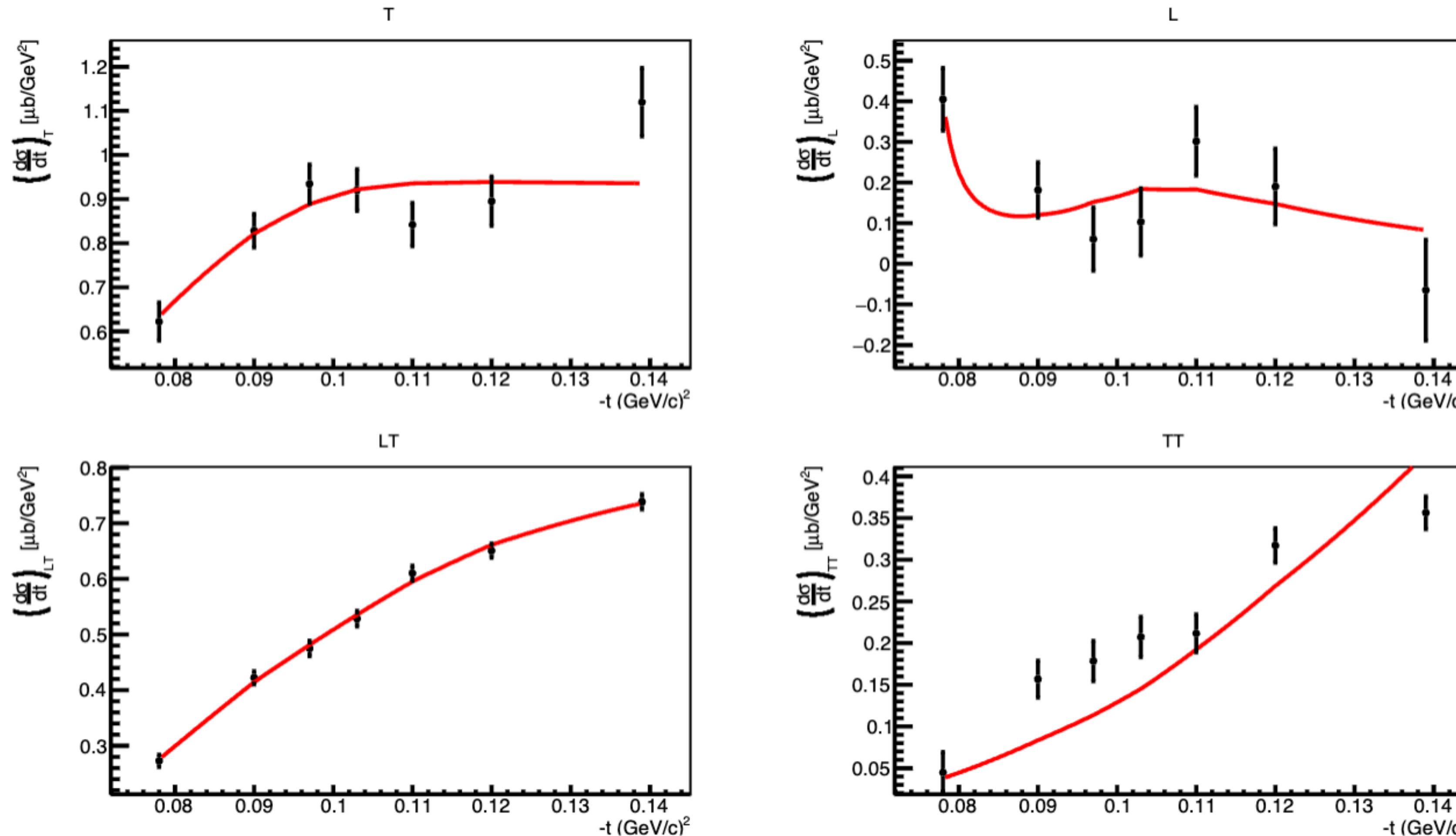
Simultaneous Rosenbluth Fit

Λ



L, T, LT, TT Cross Sections

Λ

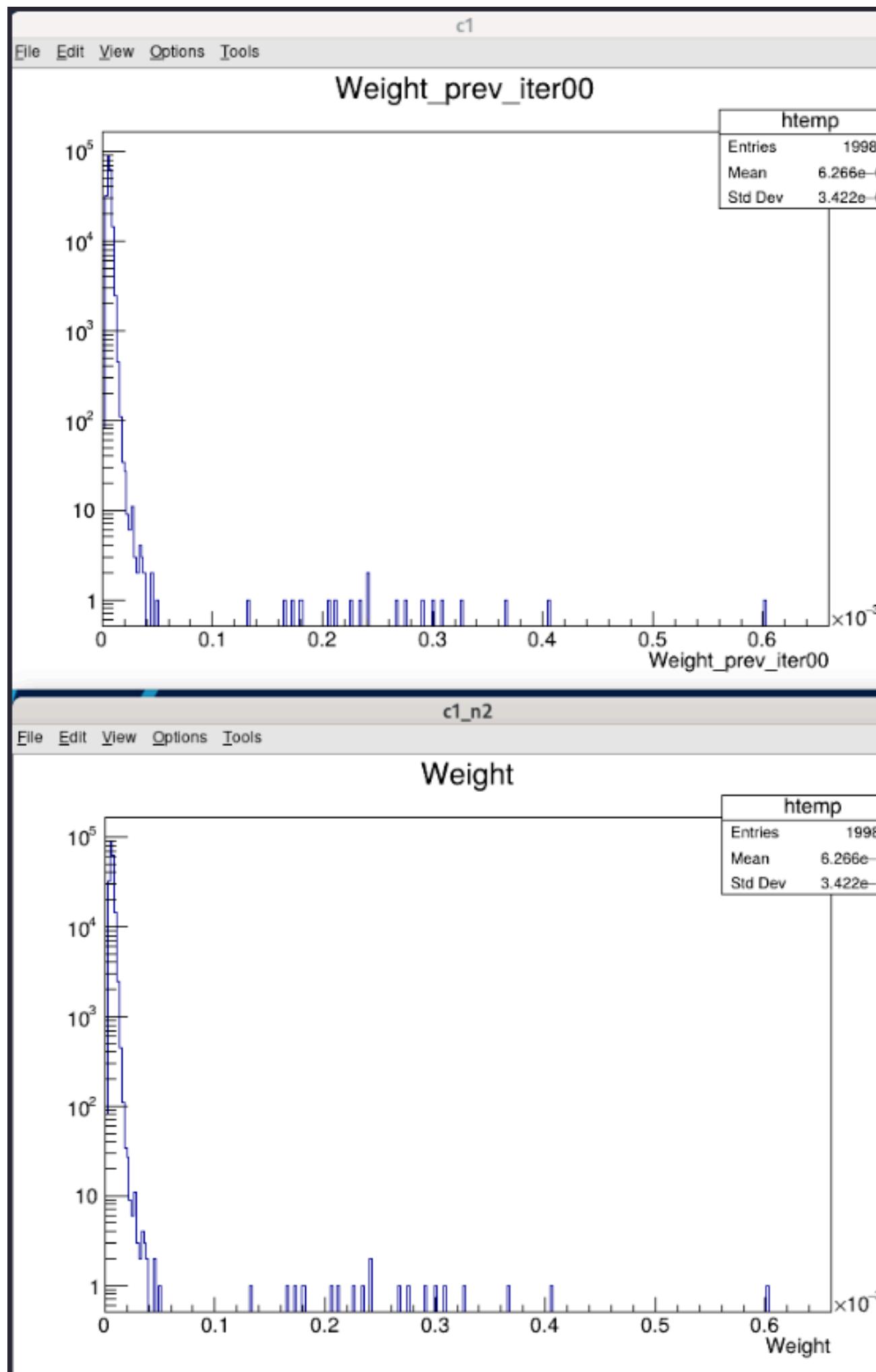


Testing the iteration script

- Calculate new Weight using initial fit parameters -> Consistent !

SIMC Output

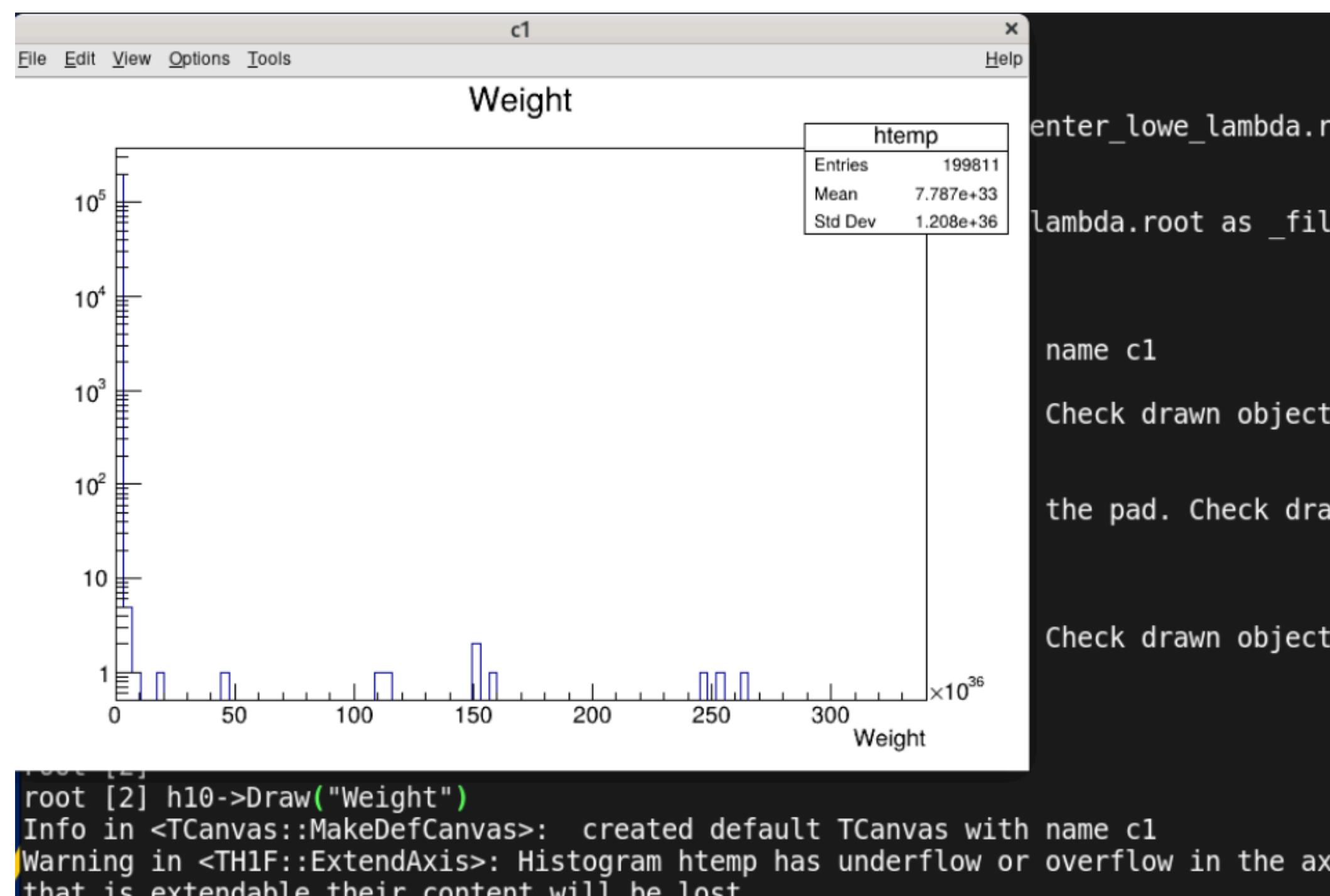
Weight
calculation script



Iteration 01

SIMC Yields

- After new Weight calculation using fit parameters of iteration 01 -> Weighed variables crash !



c1

File Edit View Options Tools Help

lambda.root as _file0.

name c1

overflow in the axis

Check drawn objects.

enter_lowe_lambda.root

lambda.root as _file0

name c1

Check drawn objects.

the pad. Check drawn

Check drawn objects.

enter_lowe_lambda.root

Attaching file Q0p5W2p40_iter01/Prod_Coin_Q0p5W2p40center_lowe_lambda.root as _file0.

..

(TFile *) 0x11b8e00

root [1] h10->Draw("W","Weight")

Info in <TCanvas::MakeDefCanvas>: created default TCanvas with name c1

(long long) 196373

Warning in <TCanvas::ResizePad>: Inf/NaN propagated to the pad. Check drawn objects.

Warning in <TCanvas::ResizePad>: c1 height changed from 0 to 10

root [2] Warning in <TCanvas::ResizePad>: Inf/NaN propagated to the pad. Check drawn objects.

Warning in <TCanvas::ResizePad>: c1 height changed from 0 to 10

Warning in <TCanvas::ResizePad>: Inf/NaN propagated to the pad. Check drawn objects.

Warning in <TCanvas::ResizePad>: c1 height changed from 0 to 10

SIMC Yields

Initial			Iteration 01		
3.9	1.0	1	1.954	0.191	1
5.8	1.0	2	-0.757	0.094	2
0.0000	0.0000	3	0.000	0.000	3
0.0000	0.0000	4	0.000	0.000	4
214.0	10.0	5	2390.261	3496.946	5
8.6	1.0	6	246.736	17.276	6
0.7	0.1000	7	-411.771	26.382	7
1.77	0.5000	8	-227.478	5.185	8
0.05	0.05	9	507.688	11.646	9
3.98	1.0	10	3.698	0.002	10
0.8	0.5	11	-0.321	0.048	11
0.7	0.1	12	-34.337	0.858	12
22.5	5.	13	-0.125	0.184	13
14.9	1.	14	2.121	0.076	14
0.0	0.0	15	0.000	0.000	15
0.0	0.0	16	0.000	0.000	16