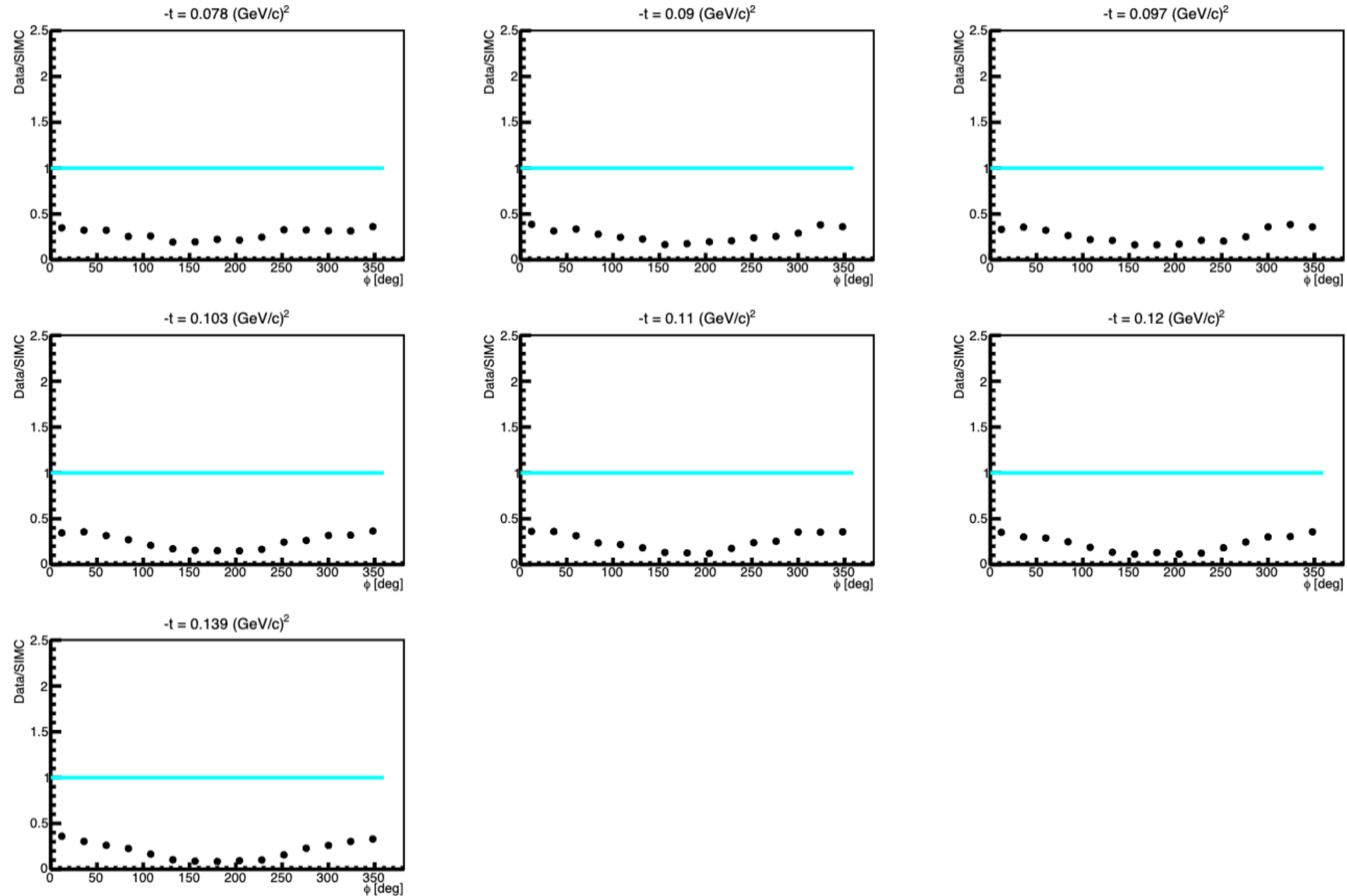


Kaon LTSep iterations

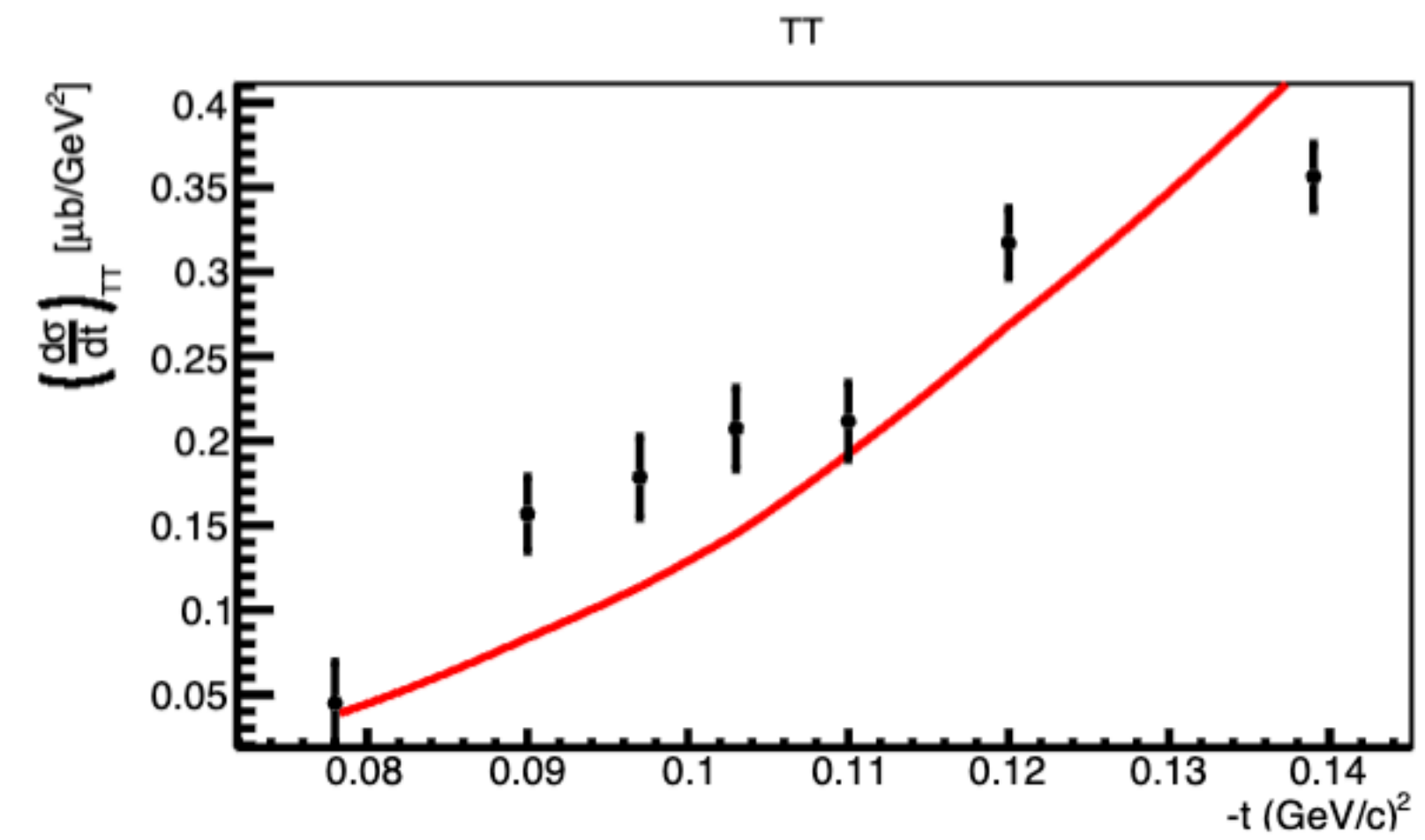
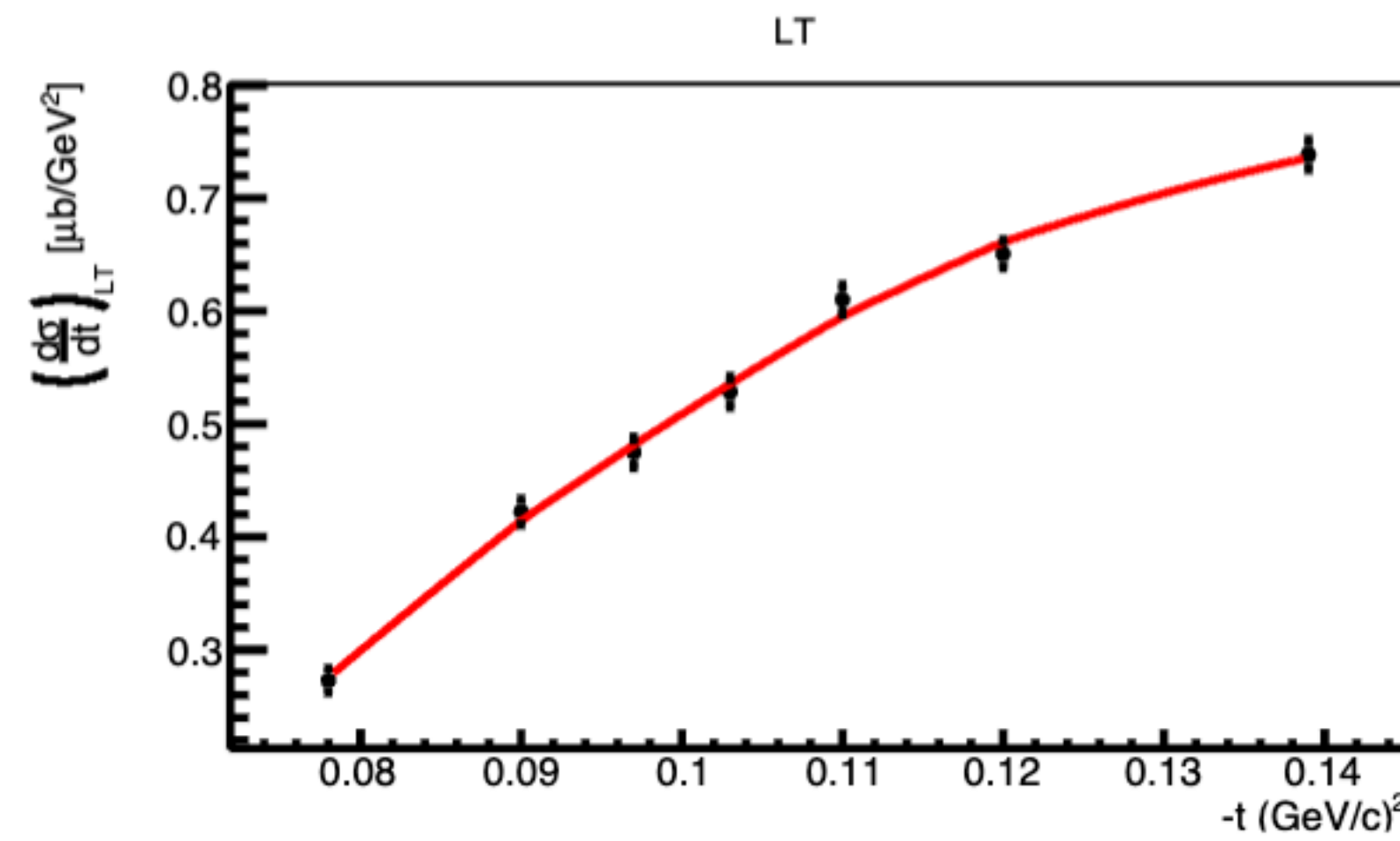
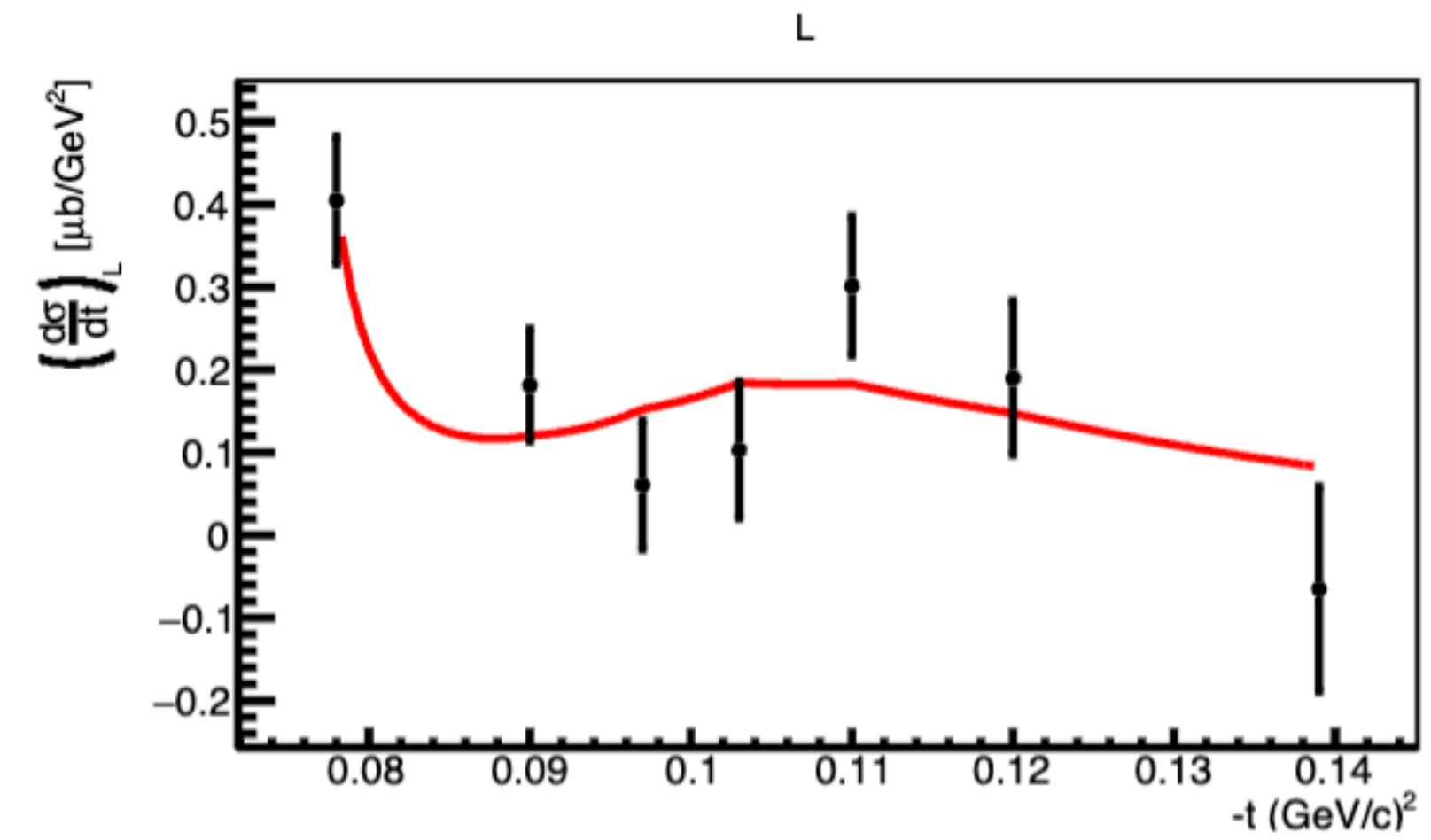
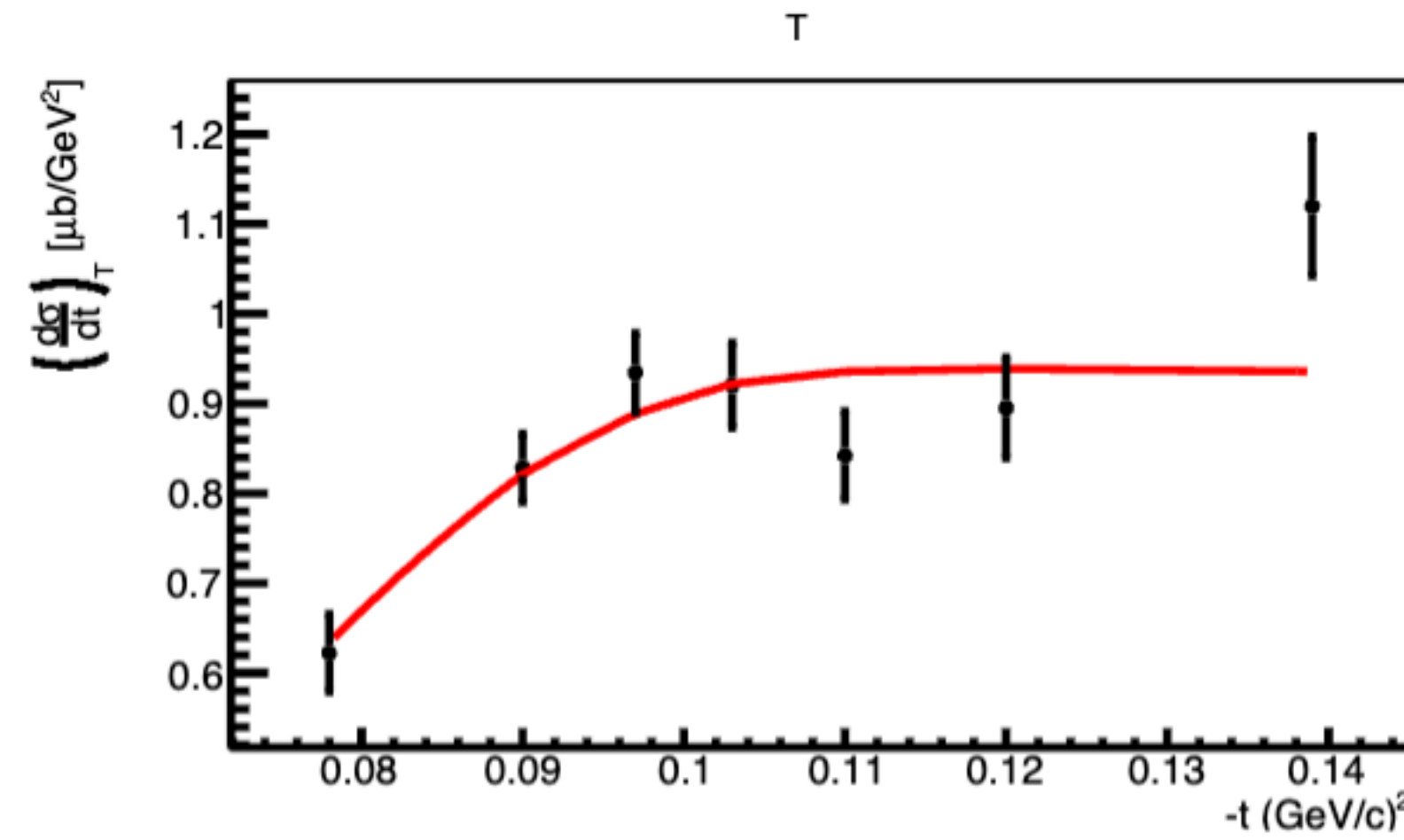
Abdennacer Hamdi

KaonLT Meeting
2025/08/07

Initial parameters



L, T, LT, TT Cross Sections



L, T, LT, TT Cross Sections Parameters

Initial

3.9	1.0	1
5.8	1.0	2
0.0000	0.0000	3
0.0000	0.0000	4
214.0	10.0	5
8.6	1.0	6
0.7	0.1000	7
1.77	0.5000	8
0.05	0.05	9
3.98	1.0	10
0.8	0.5	11
0.7	0.1	12
22.5	5.	13
14.9	1.	14
0.0	0.0	15
0.0	0.0	16

Iteration 01

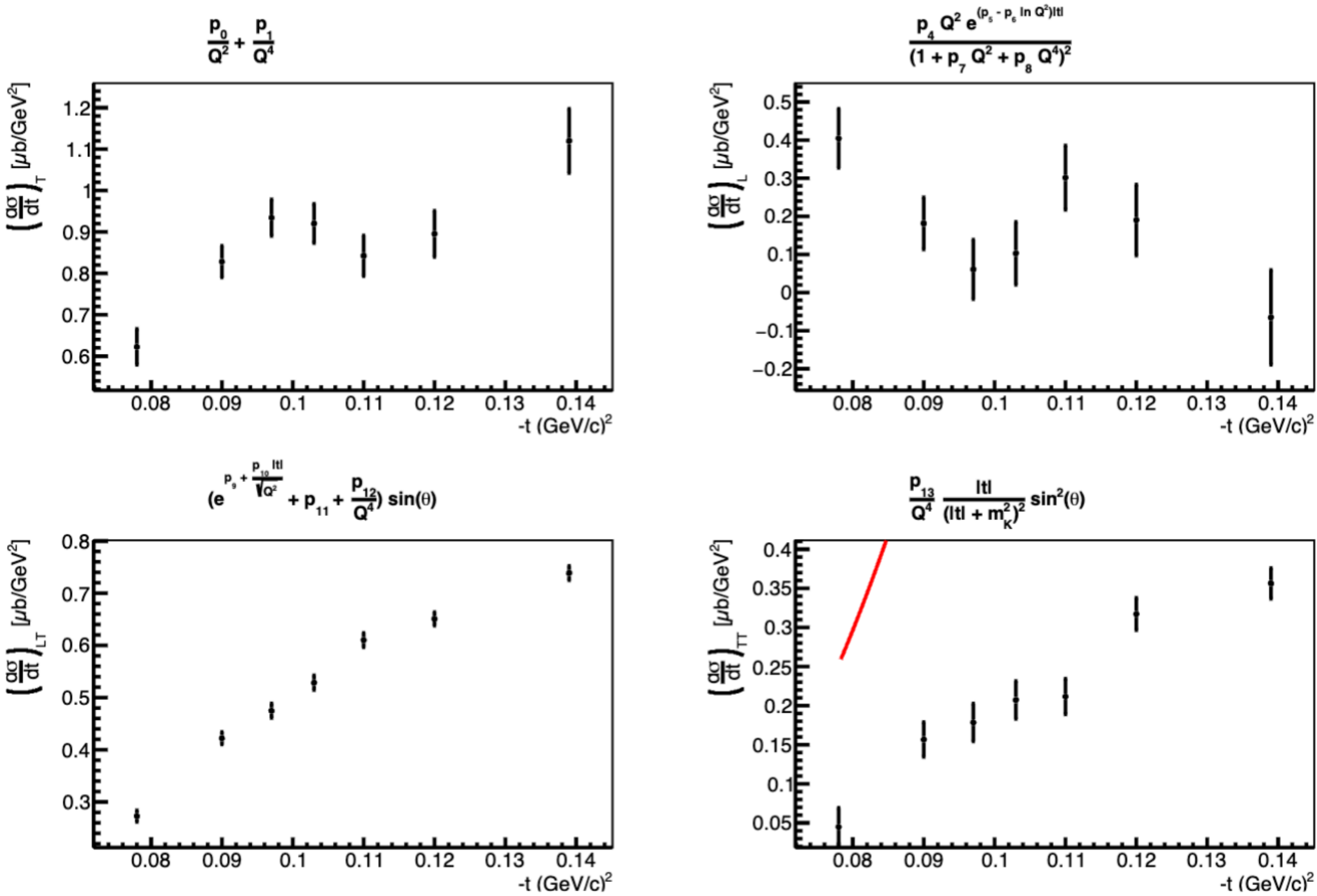
1.954	0.191	1
-0.757	0.094	2
0.000	0.000	3
0.000	0.000	4
2390.261	3496.946	5
246.736	17.276	6
-411.771	26.382	7
-227.478	5.185	8
507.688	11.646	9
3.698	0.002	10
-0.321	0.048	11
-34.337	0.858	12
-0.125	0.184	13
2.121	0.076	14
0.000	0.000	15
0.000	0.000	16

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

Initial parameters $\pm 5\%$, $\pm 10\%$

L, T, LT, TT Cross Sections Parameters

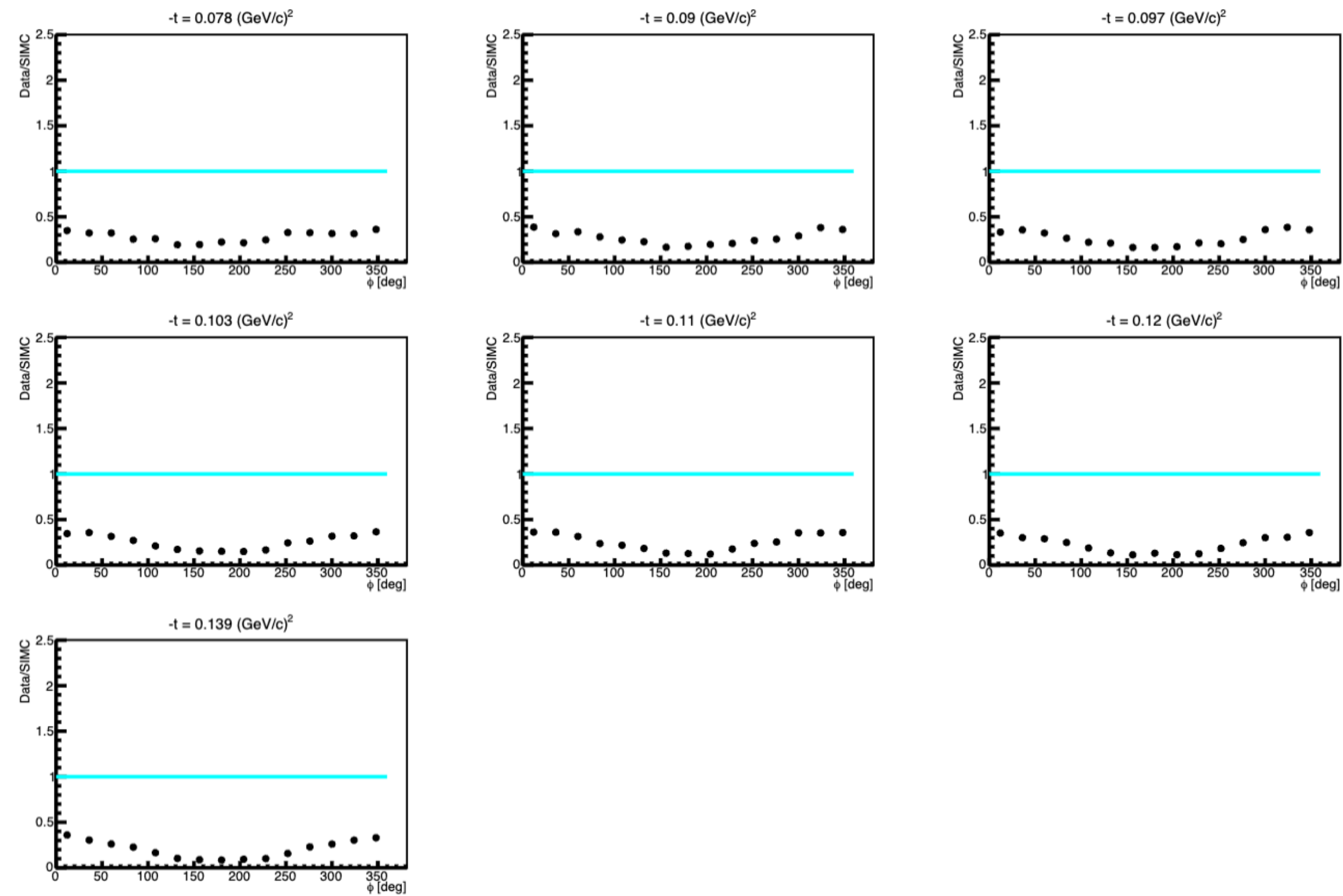
- The fits with $\pm 5\%$ variation in initial parameters -> Fits do not describe well the data



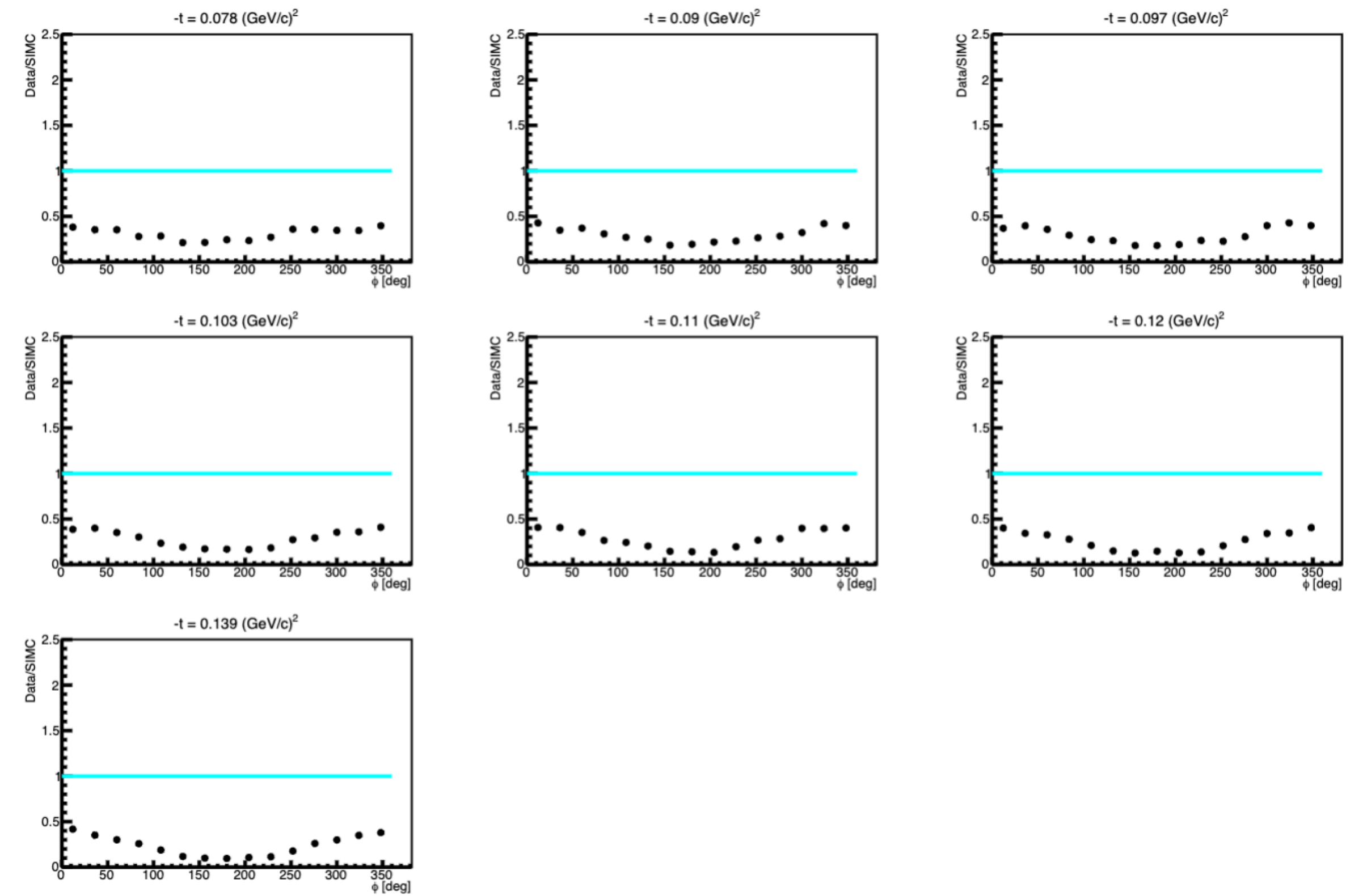
--- Previous parameters ---			New parameters ---		
3.9	1.0	1	3.705	0.000	1
5.8	1.0	2	5.510	0.000	2
0.0000	0.0000	3	0.000	0.000	3
0.0000	0.0000	4	0.000	0.000	4
214.0	10.0	5	203.300	0.000	5
8.6	1.0	6	8.170	0.000	6
0.7	0.1000	7	0.665	0.000	7
1.77	0.5000	8	1.859	0.000	8
0.05	0.05	9	0.052	0.000	9
3.98	1.0	10	3.802	0.001	10
0.8	0.5	11	0.826	0.047	11
0.7	0.1	12	0.709	0.000	12
22.5	5.0	13	21.384	0.000	13
14.9	1.0	14	14.155	0.000	14
0.0	0.0	15	0.000	0.000	15
0.0	0.0	16	0.000	0.000	16

Data/SIMC Ratio

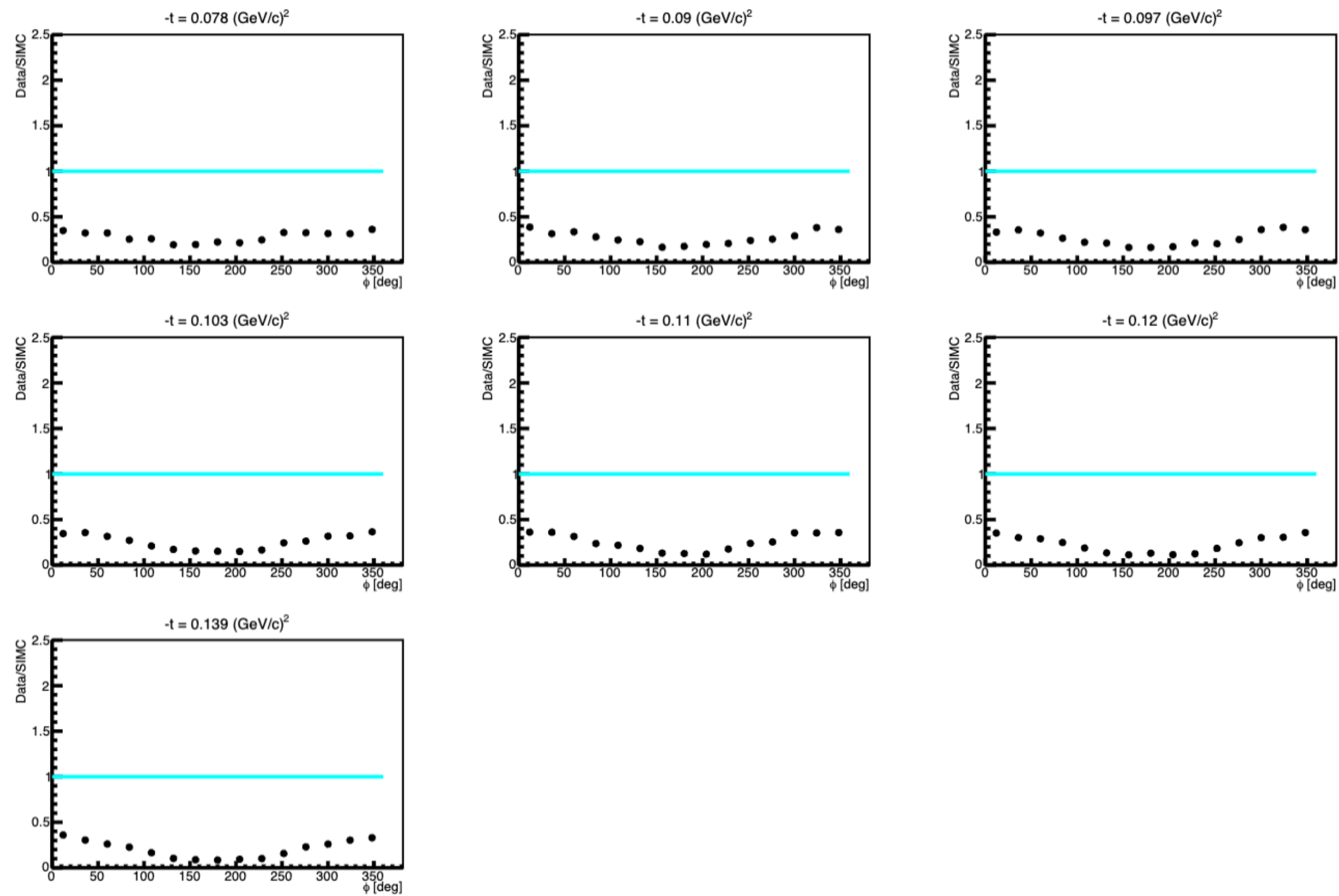
● The fits with initial parameters



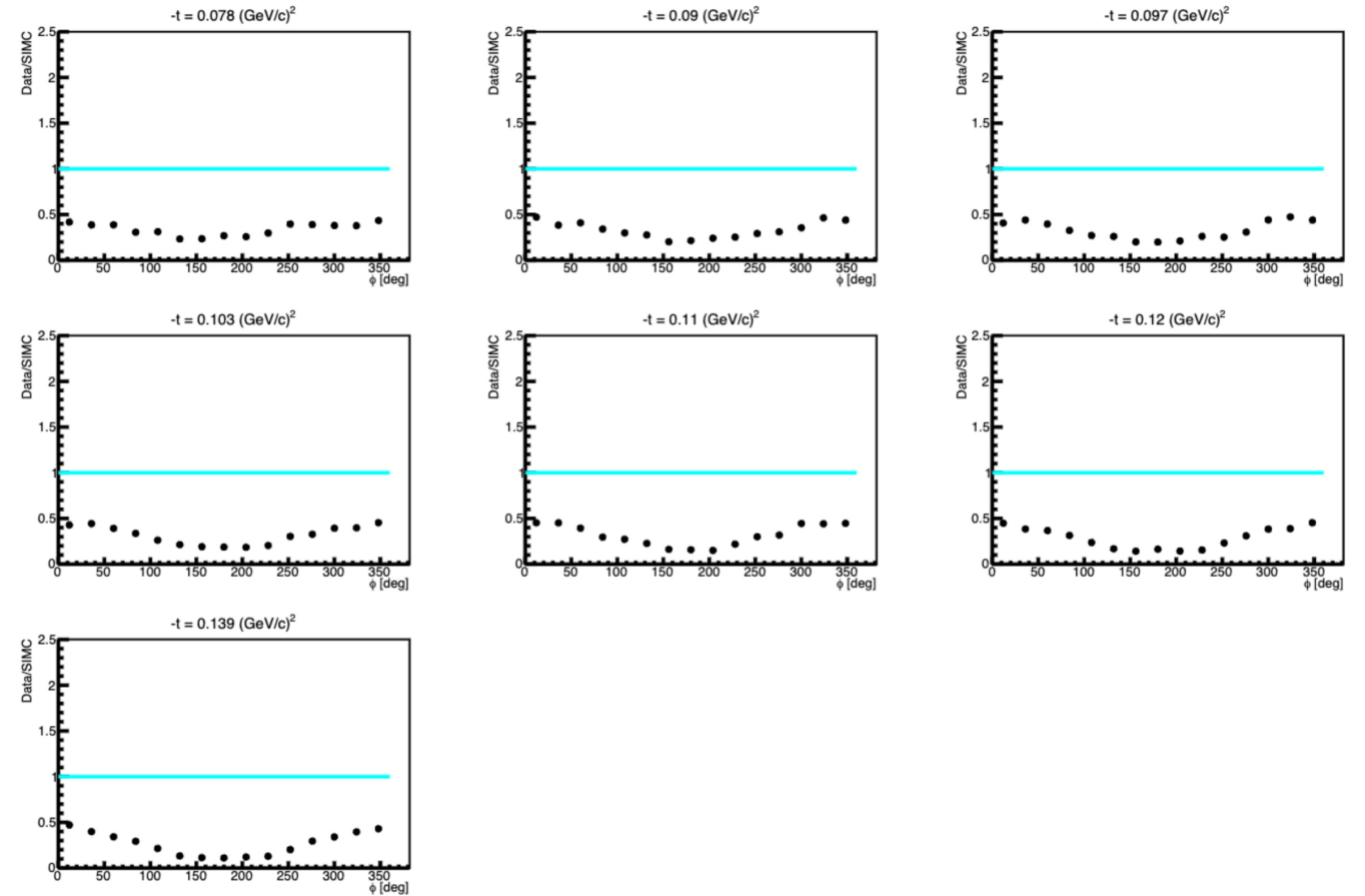
● The fits with $\pm 5\%$ variation in initial parameters



● The fits with initial parameters



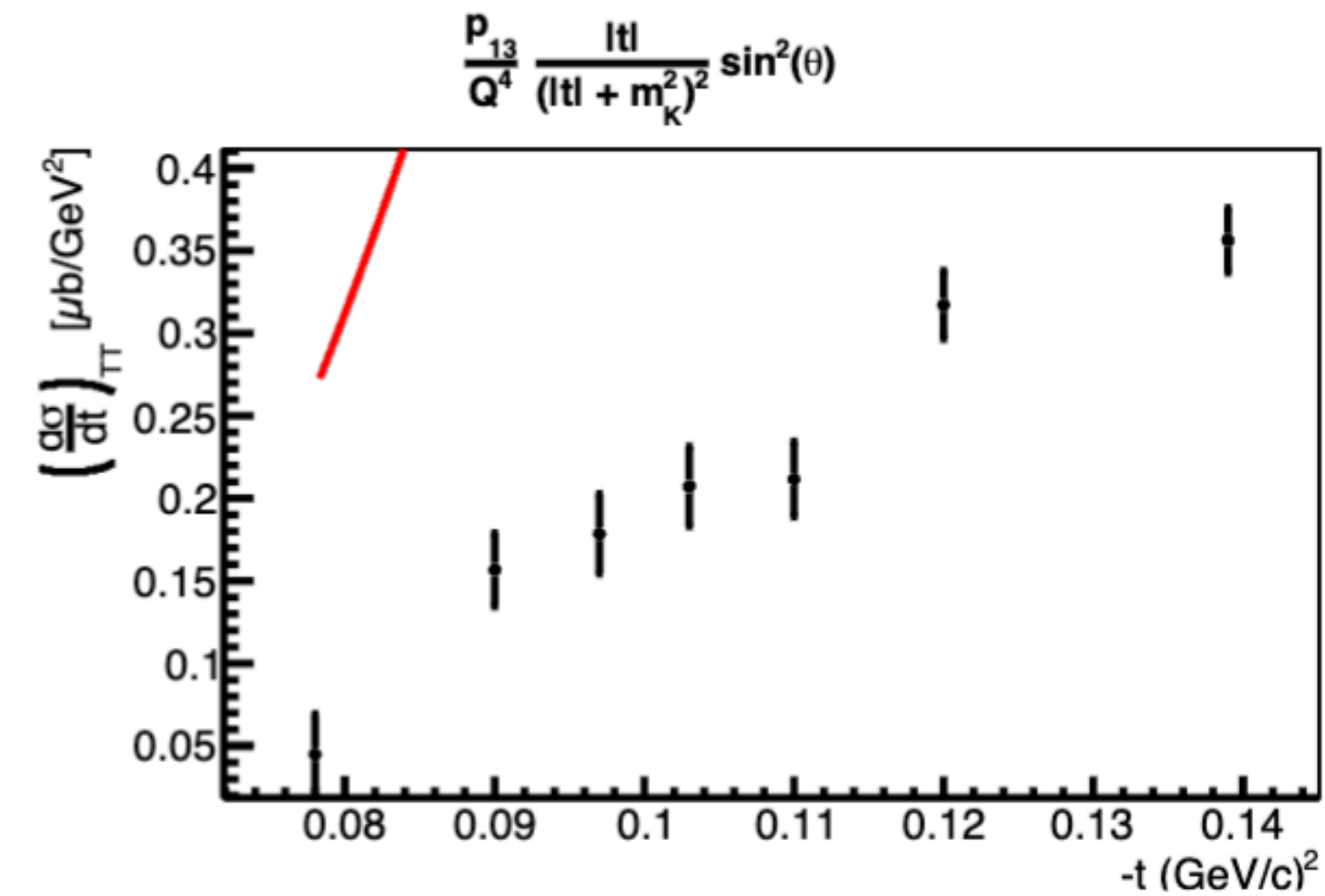
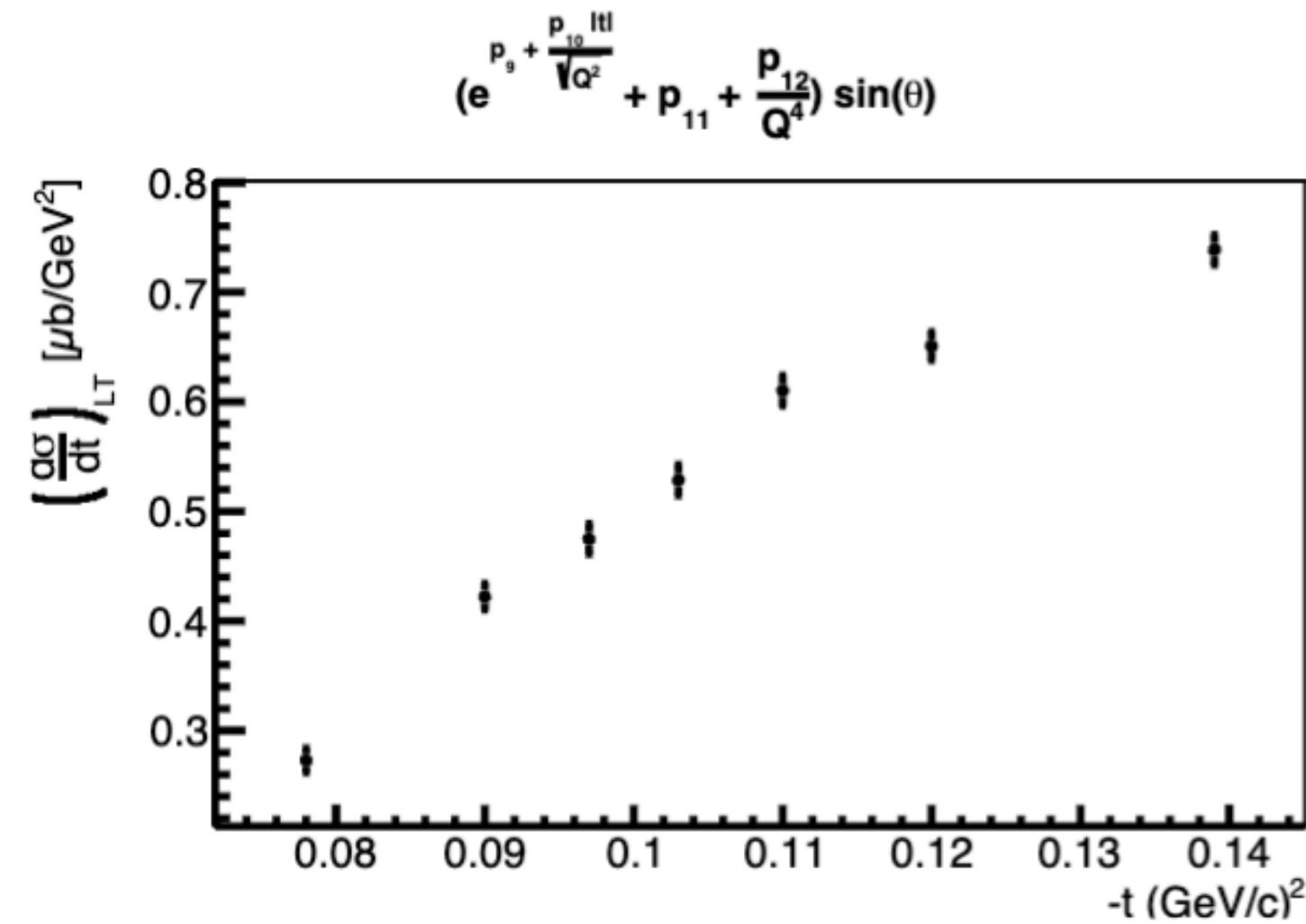
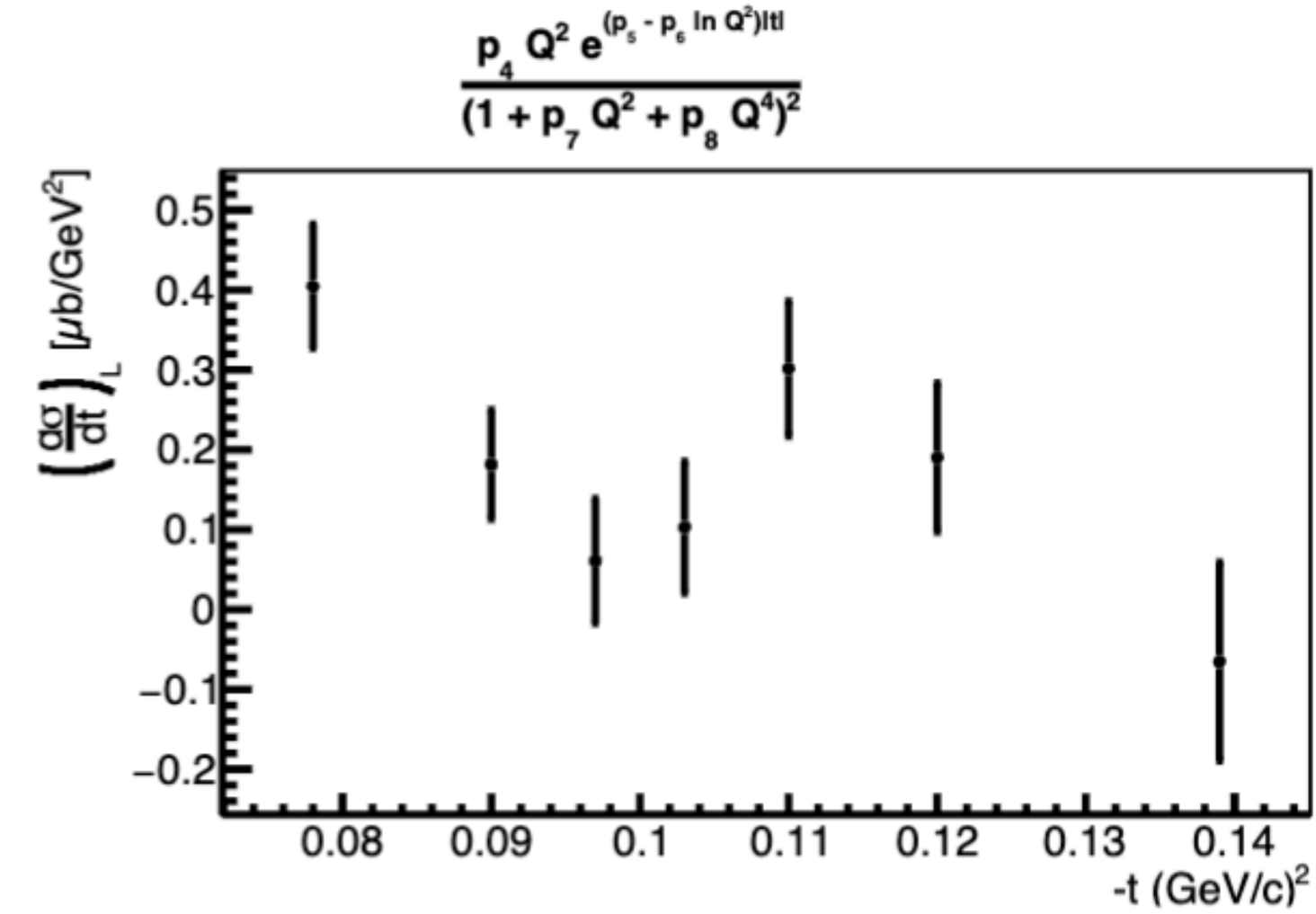
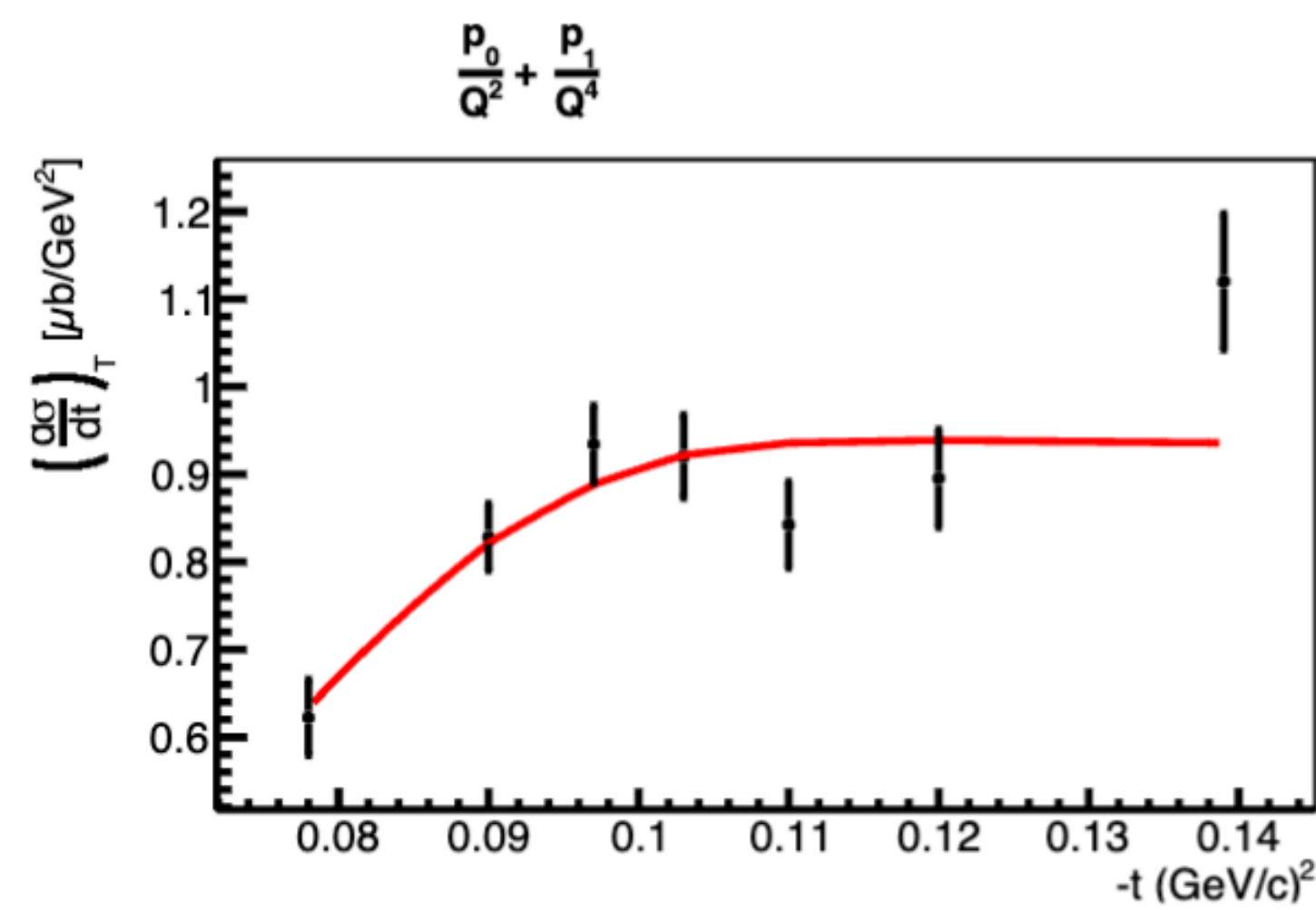
● The fits with $\pm 10\%$ variation in initial parameters



Investigating the parameters

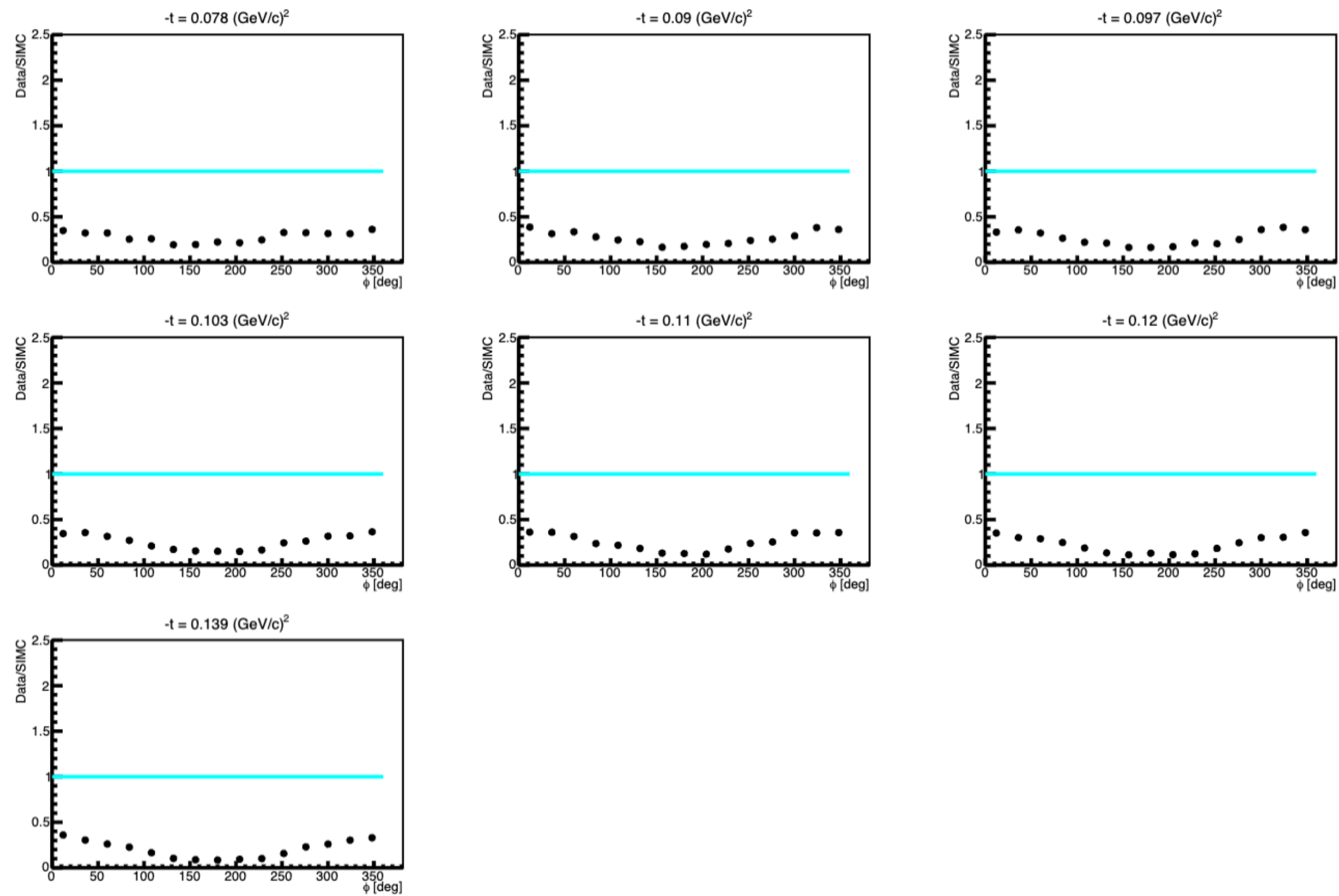
L, T, LT, TT Cross Sections

- Fix all parameters except: p0 and p1 in T

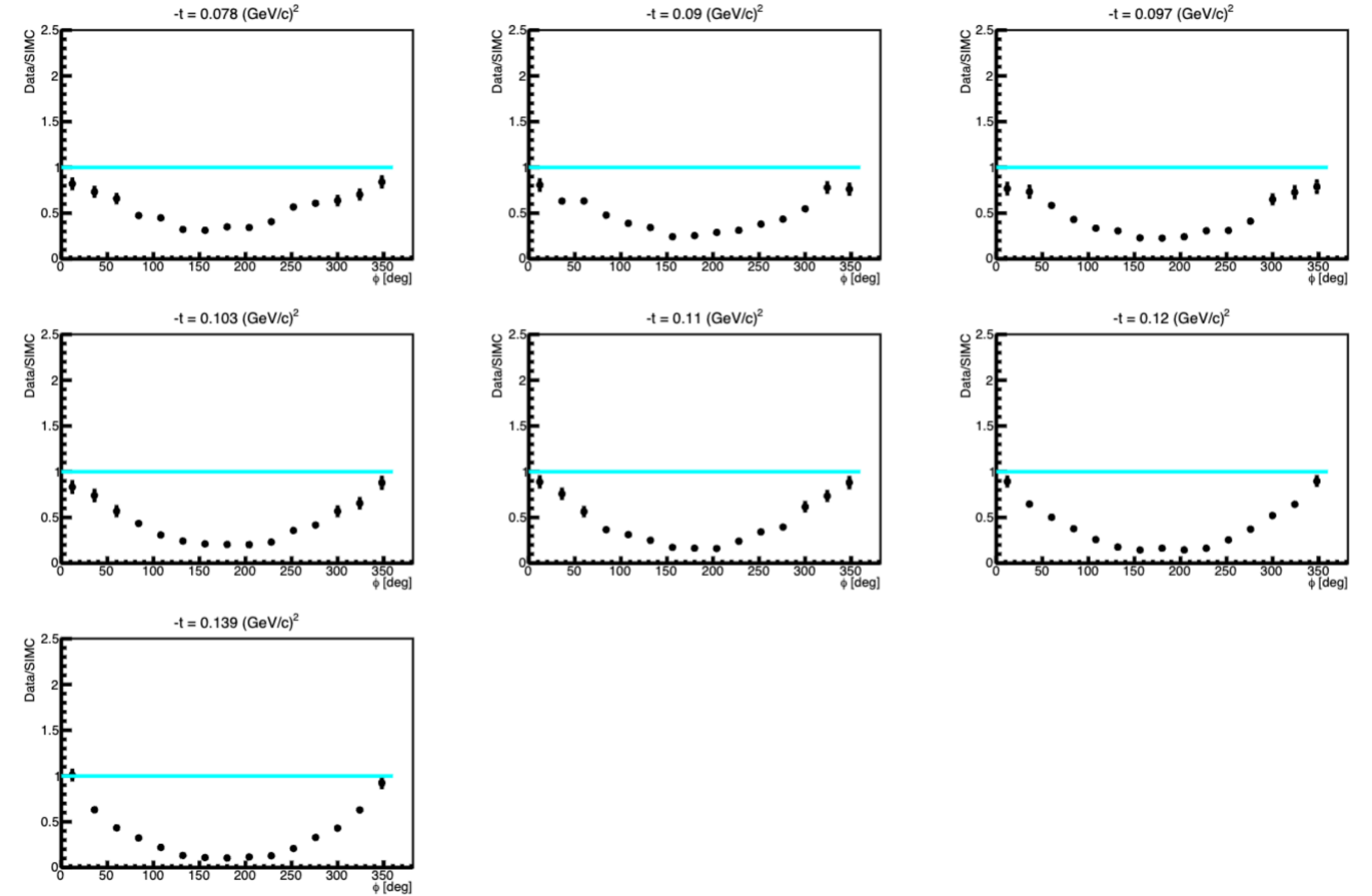


Data/SIMC Ratio

- The fits with initial parameters

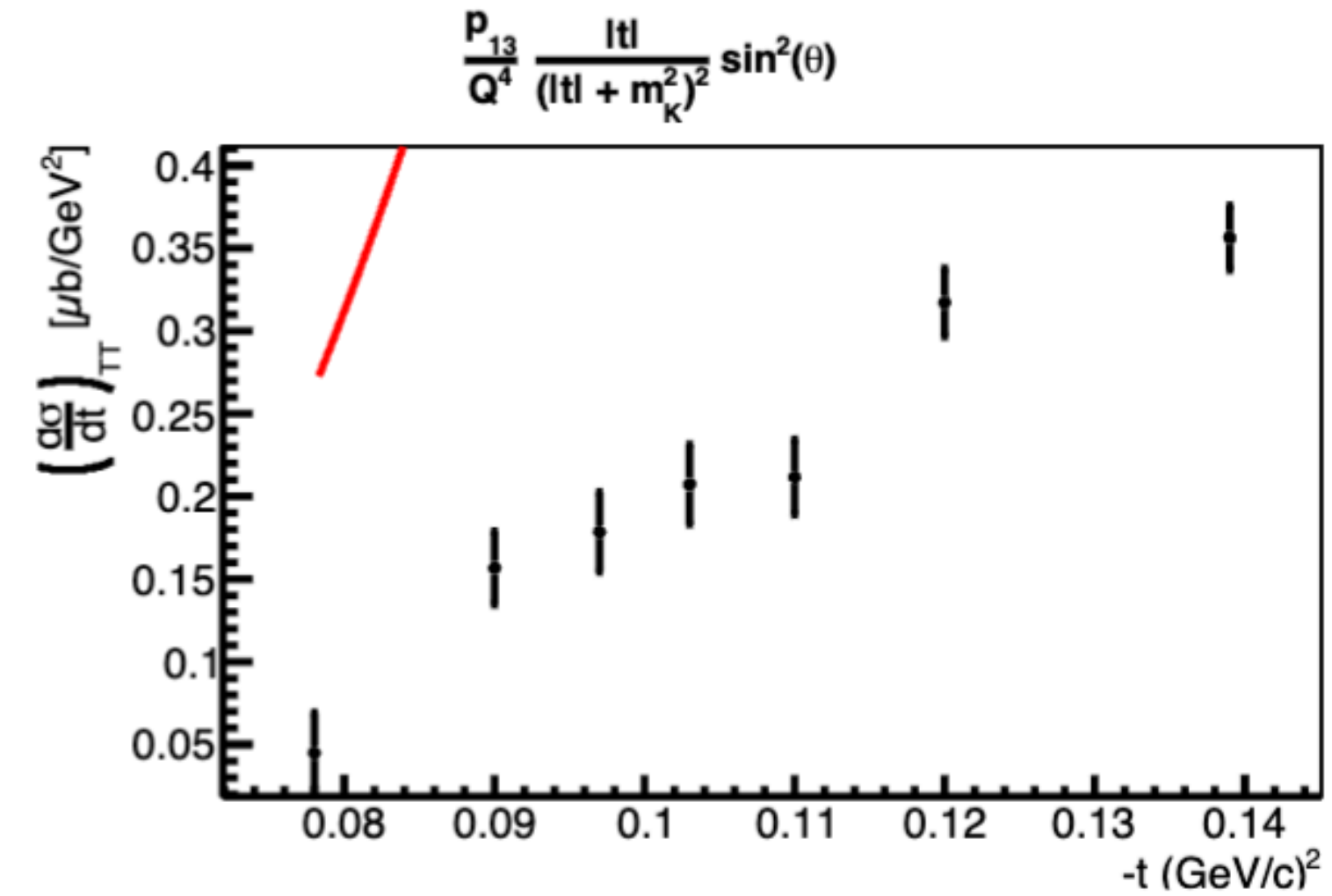
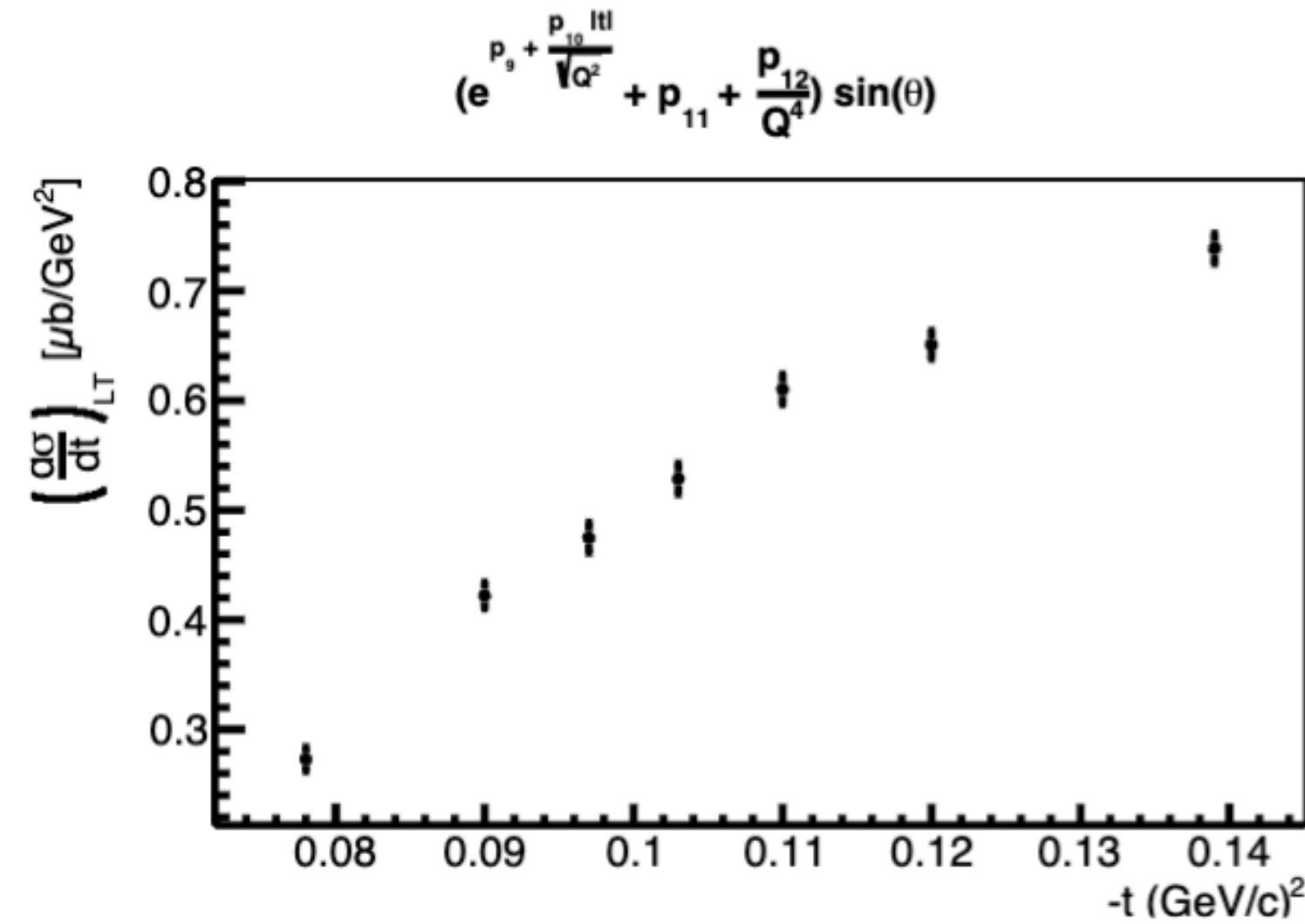
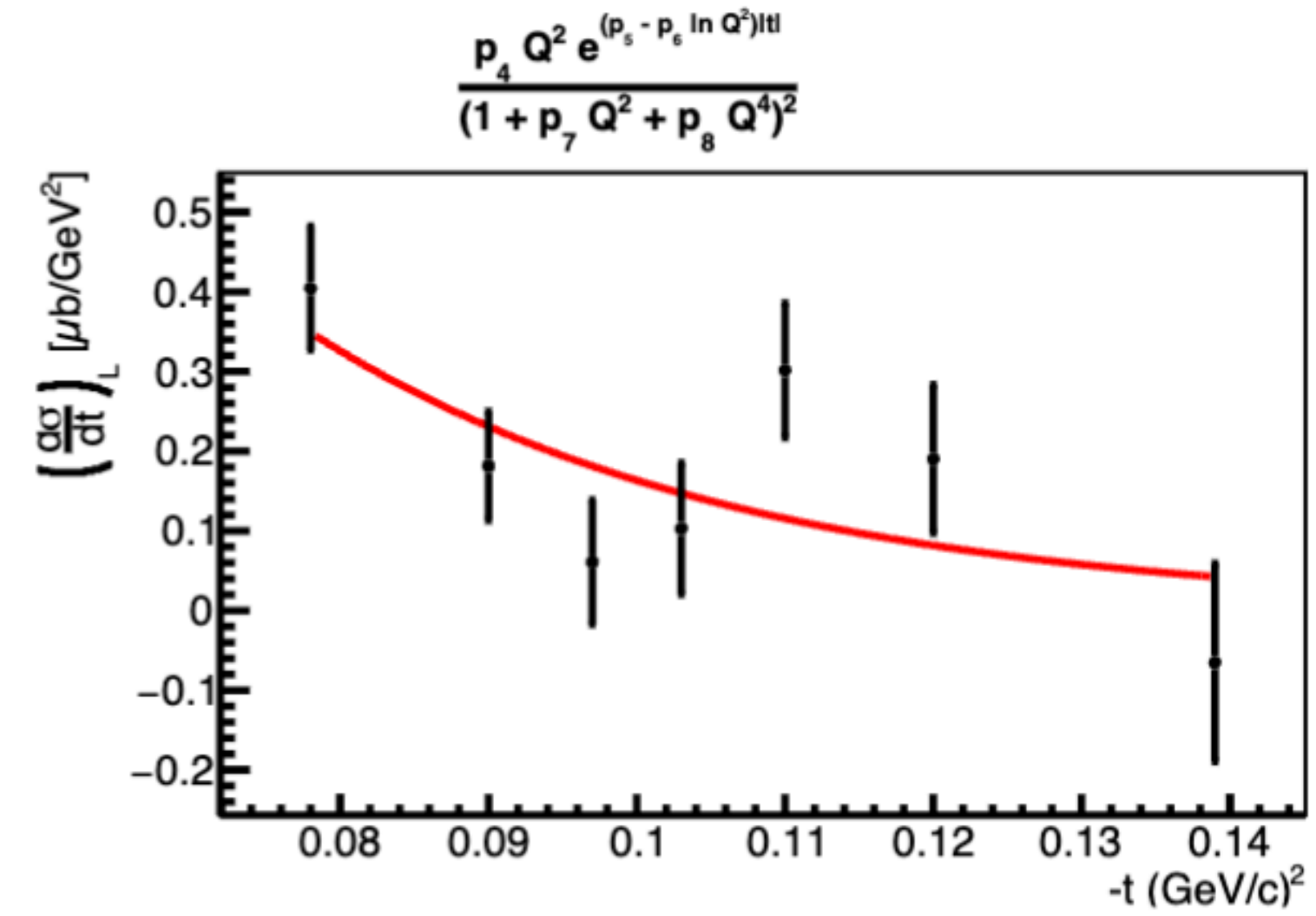
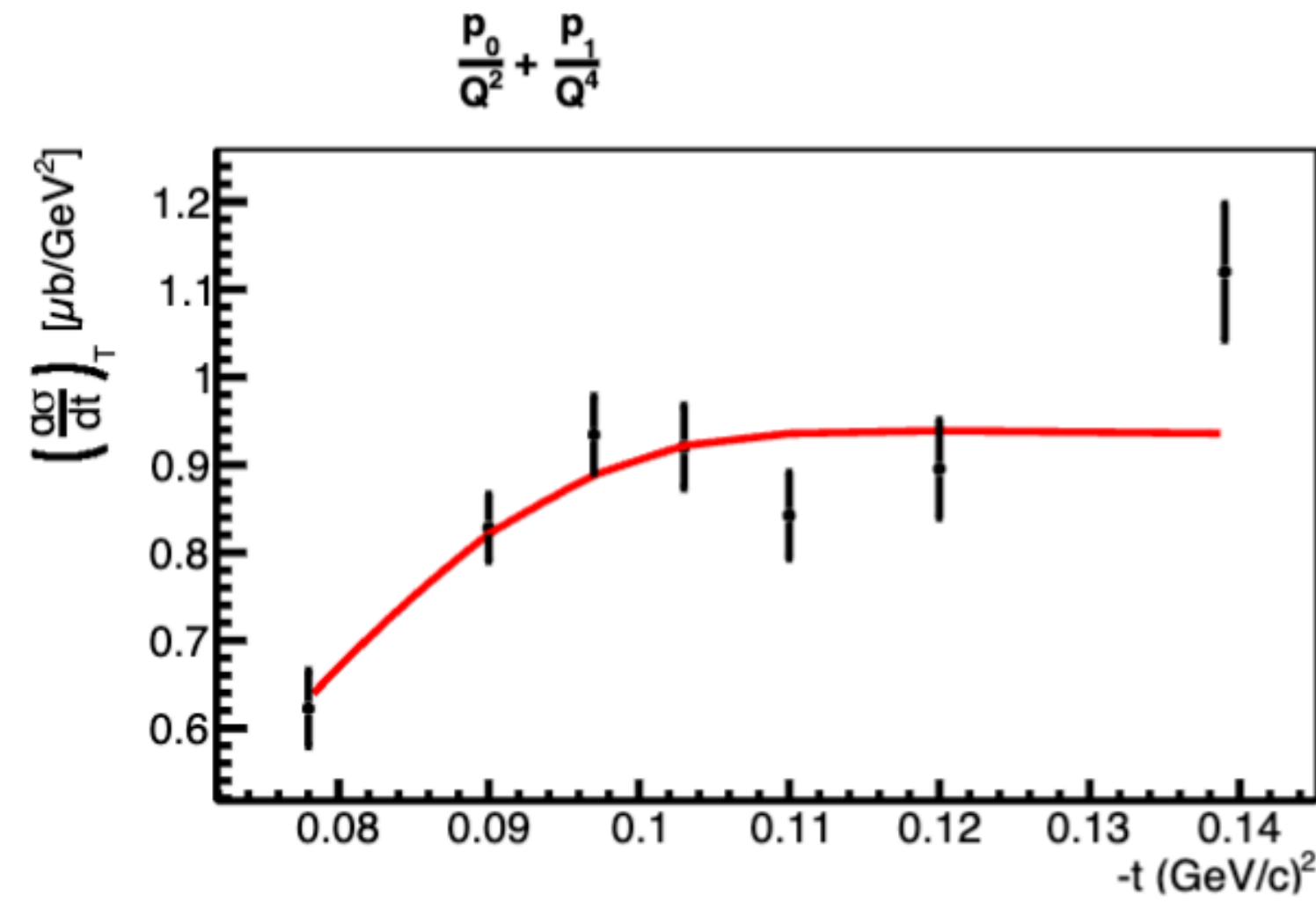


- Fix all param except: p_0 and p_1 in T

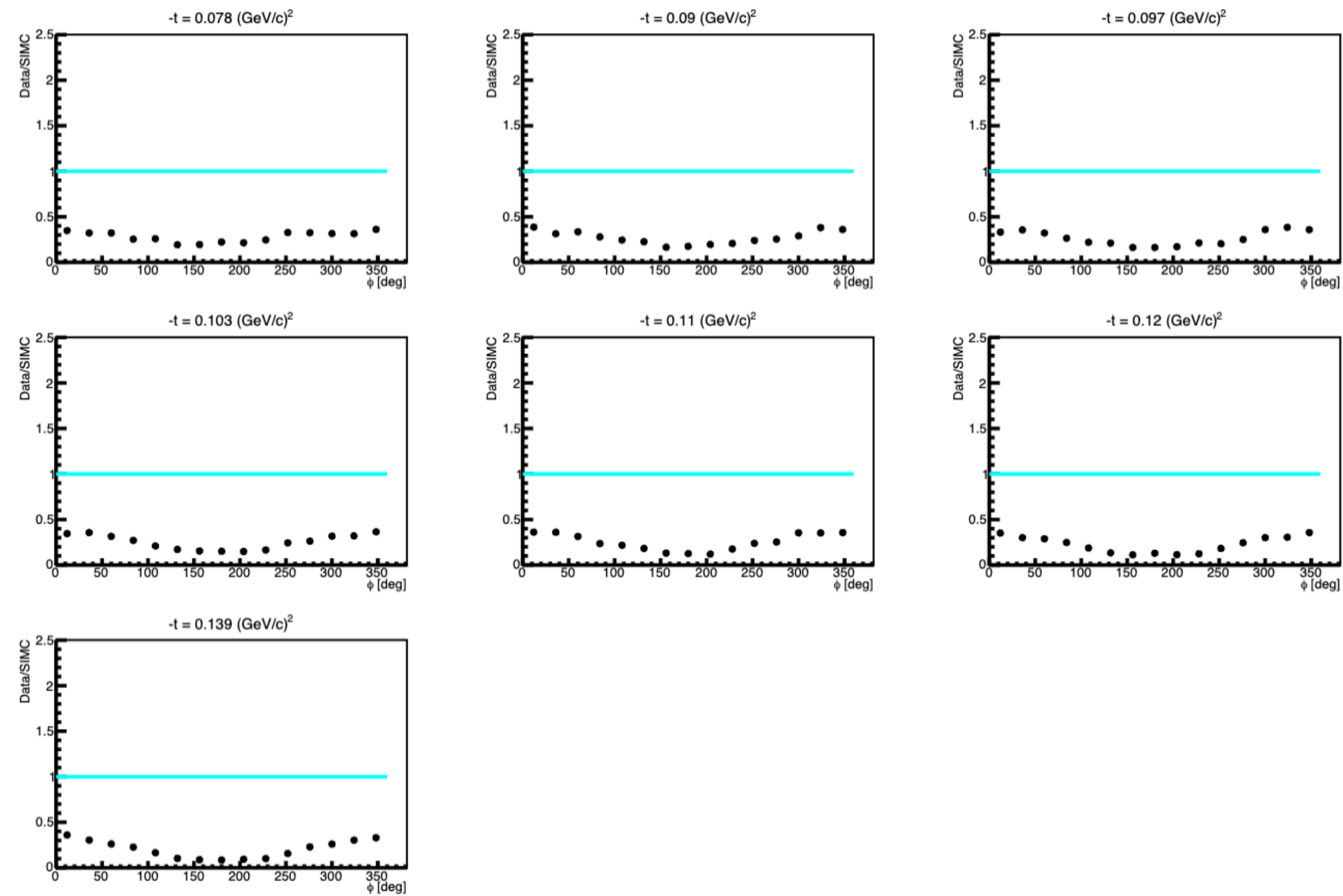


L, T, LT, TT Cross Sections

- Fix all parameters except: p0 and p1 in T, p4 and p5 in L



- The fits with initial parameters



- Fix all parameters except: p_0 and p_1 in T, p_4 and p_5 in L

