The LaTeX report

Generated by jcordero on 21 March 2020, 20:56:12

This report has been generated automatically by MadAnalysis 5.

Please cite:

> **E. Conte, B. Fuks and G. Serret**,
> *MadAnalysis 5, A User-Friendly Framework for Collider Phenomenology*,
> Comput. Phys. Commun. **184** (2013) 222-256,
> arXiv:1206.1599 [hep-ph].

To contact us:

> **http://madanalysis.irmp.ucl.ac.be**
> **ma5team@iphc.cnrs.fr**

Contents

1 Setup

1.1 Command history

```
ma5>
ma5>import /home/jcordero/CMS/Theory/MG5_aMC_v2_7_2//bin/internal/ufomodel
ma5>import /home/jcordero/CMS/Theory/MG5_aMC_v2_7_2/corderom/output/results/ntgc_llg_CWWL4/-
Events/run_01/unweighted_events.lhe.gz as unweighted_events
ma5>set main.graphic_render = root
ma5>plot THT 40 0 500 [logY]
ma5>plot MET 40 0 500 [logY]
ma5>plot SQRTS 40 0 500 [logY]
ma5>plot PT(z[1]) 40 0 1000 [logY interstate]
ma5>plot ETA(z[1]) 40 -7 7 [logY interstate]
ma5>plot PT(a[1]) 40 0 1000 [logY]
ma5>plot ETA(a[1]) 40 -7 7 [logY]
ma5>plot M(z[1] a[1]) 40 0 800 [logY allstate]
ma5>plot DELTAR(z[1],a[1]) 40 0 8 [logY allstate]
ma5>plot PT(a[1]) 40 0 800 [logY]
ma5>plot ETA(a[1]) 40 -7 7 [logY]
ma5>plot PT(l-[1]) 40 0 650 [logY]
ma5>plot ETA(l-[1]) 40 -7 7 [logY]
ma5>plot PT(l+[1]) 40 0 650 [logY]
ma5>plot ETA(l+[1]) 40 -7 7 [logY]
ma5>plot M(a[1] l+[1]) 40 0 800 [logY ]
ma5>plot M(a[1] l-[1]) 40 0 800 [logY ]
ma5>plot M(a[1] l-[1] l+[1]) 40 0 900 [logY ]
ma5>plot M(l-[1] l+[1]) 40 20 200 [logY ]
ma5>plot DELTAR(a[1],l+[1]) 40 0 8 [logY ]
ma5>plot DELTAR(a[1],l-[1]) 40 0 8 [logY ]
ma5>plot DELTAR(l-[1],l+[1]) 40 0 5 [logY ]
ma5>submit /home/jcordero/CMS/Theory/MG5_aMC_v2_7_2/corderom/output/results/ntgc_llg_CWWL4/-
MA5_PARTON_ANALYSIS_analysis1
```

1.2 Configuration

- MadAnalysis version 1.8.34 (2019/12/04).
- Histograms given for an integrated luminosity of 10fb^{-1}.

2 Datasets

2.1 unweighted_events

- Sample consisting of: signal events.
- Generated events: 10000 events.
- Normalization to the luminosity: 3+/- 1 events.
- Ratio (event weight): 0.0003 .

Path to the event file	Nr. of events	Cross section (pb)	Negative wgts (%)
output/results/-ntgc_llg_CWWL4/Events/-run_01/unweighted_events.lhe.gz	10000	0.000396 @ 0.31%	0.0

3 Histos and cuts

3.1 Histogram 1

*** Plot: THT**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	0.0	0.0	0.0	0.0

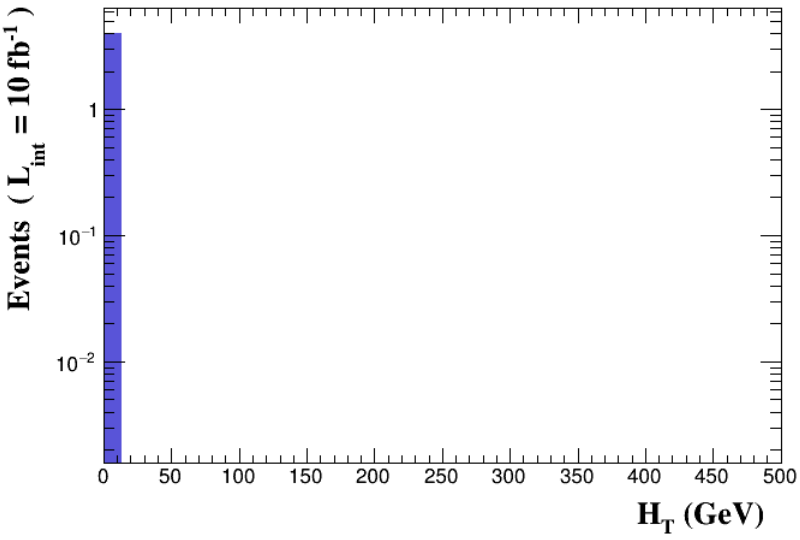

Figure 1.

3.2 Histogram 2

*** Plot: MET**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	1.20552e-08	1.662e-08	0.0	0.0

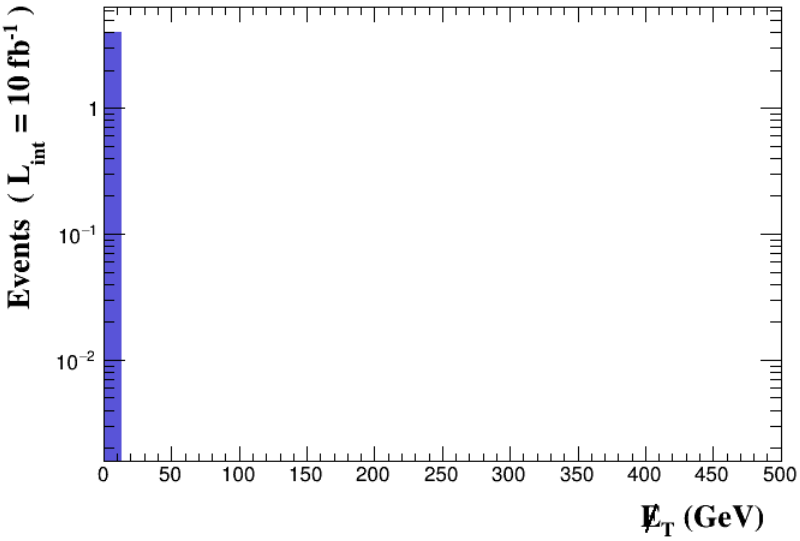

Figure 2.

3.3 Histogram 3

*** Plot: SQRTS**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	2381.63	1244	0.0	98.39

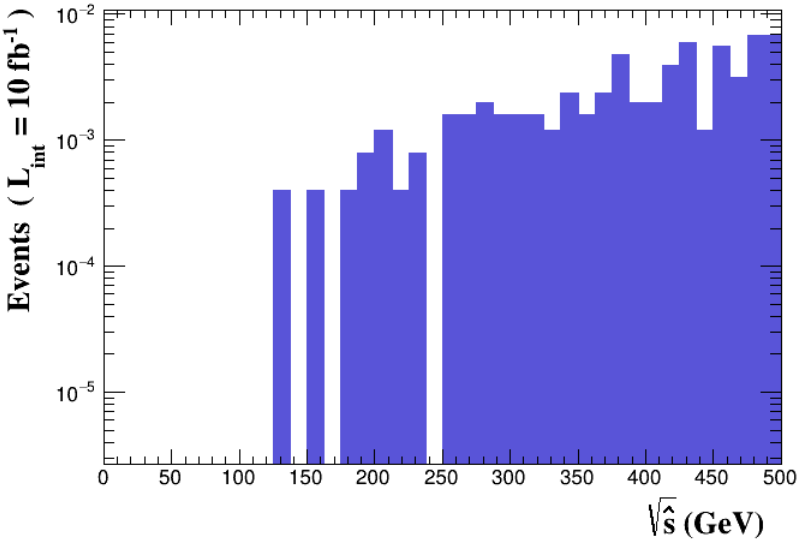

Figure 3.

3.4 Histogram 4

*** Plot: PT (z[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	895.988	547.1	0.0	35.11

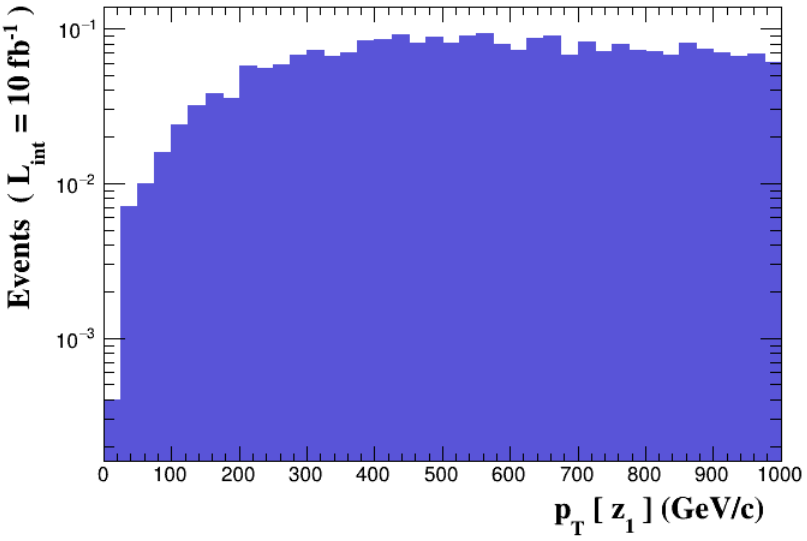

Figure 4.

3.5 Histogram 5

*** Plot: ETA (z[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	-0.0118767	1.222	0.0	0.0

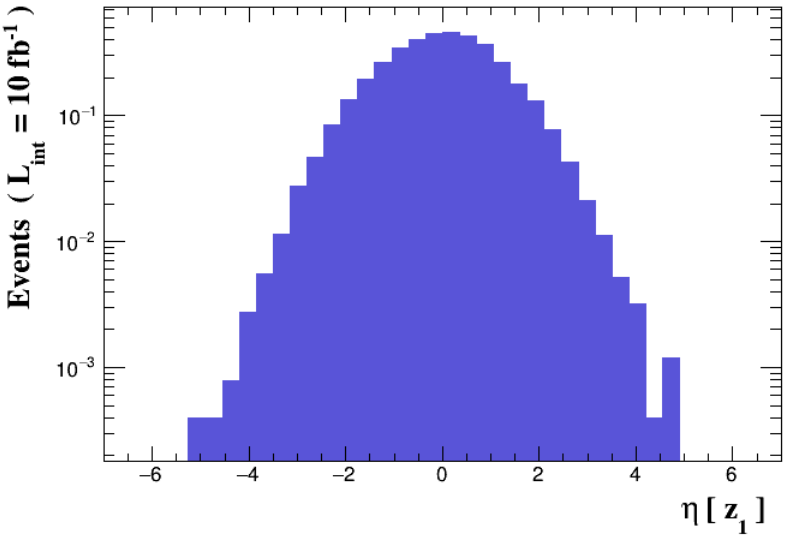

Figure 5.

3.6 Histogram 6

*** Plot: PT (a[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	895.988	547.1	0.0	35.11

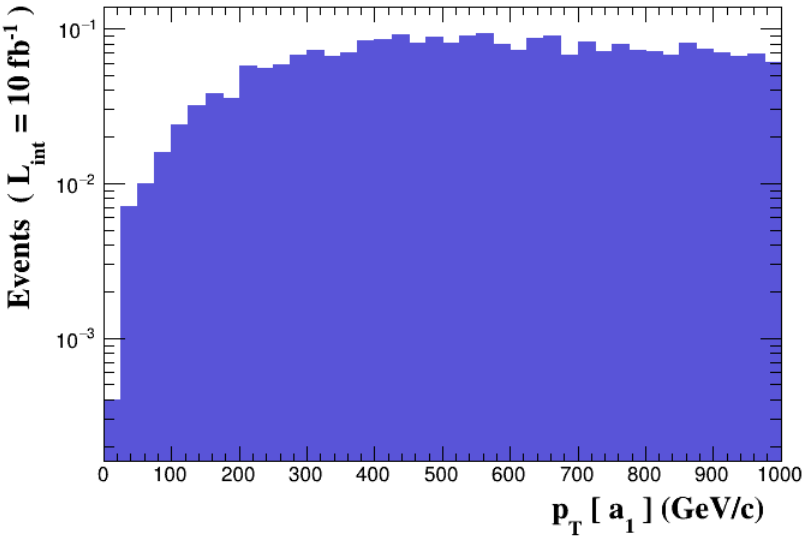

Figure 6.

3.7 Histogram 7

*** Plot: ETA (a[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	-0.00537811	1.088	0.0	0.0

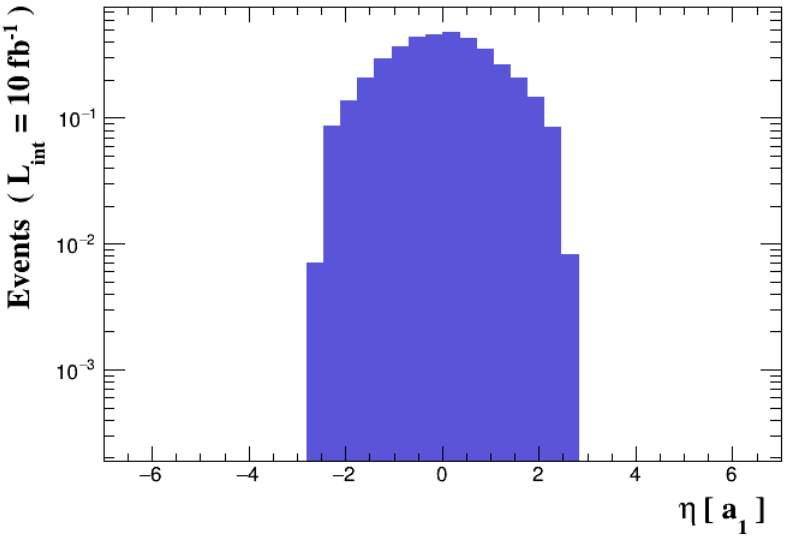

Figure 7.

3.8 Histogram 8

*** Plot: M (a[1] z[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	2381.63	1244	0.0	94.03

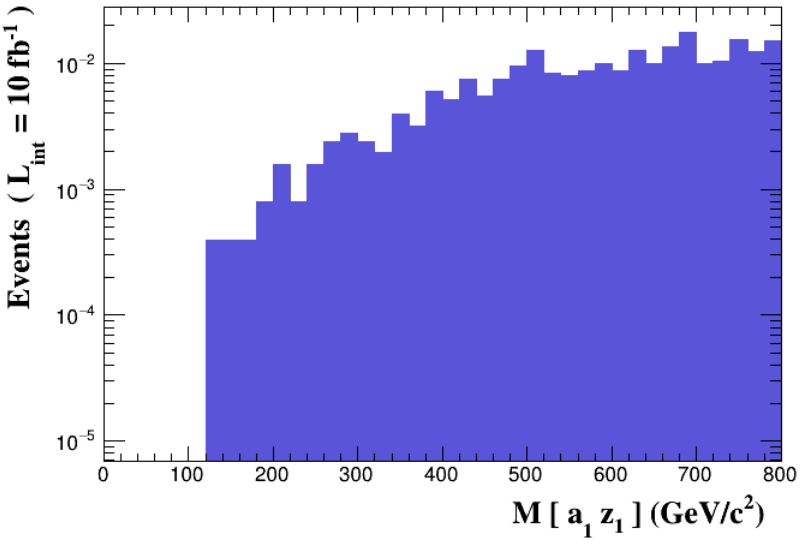

Figure 8.

3.9 Histogram 9

*** Plot: DELTAR (z[1] , a[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	3.60715	0.5551	0.0	0.0

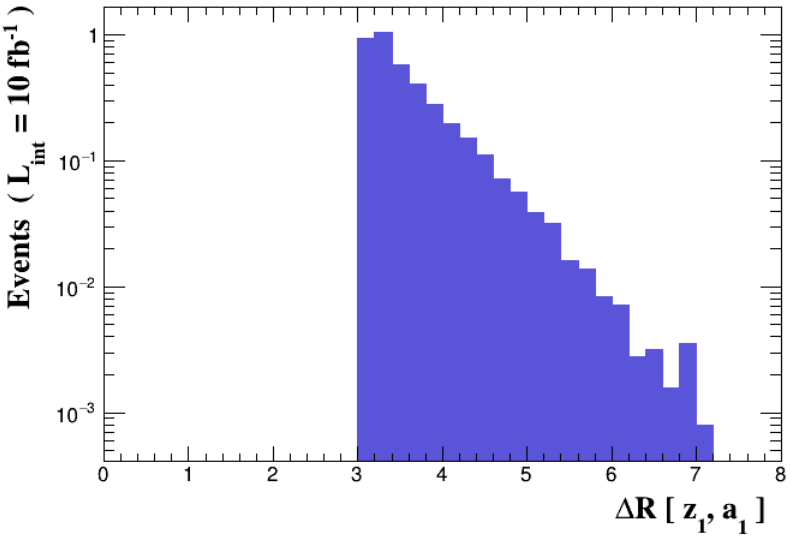

Figure 9.

3.10 Histogram 10

*** Plot: PT (a[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	895.988	547.1	0.0	49.28

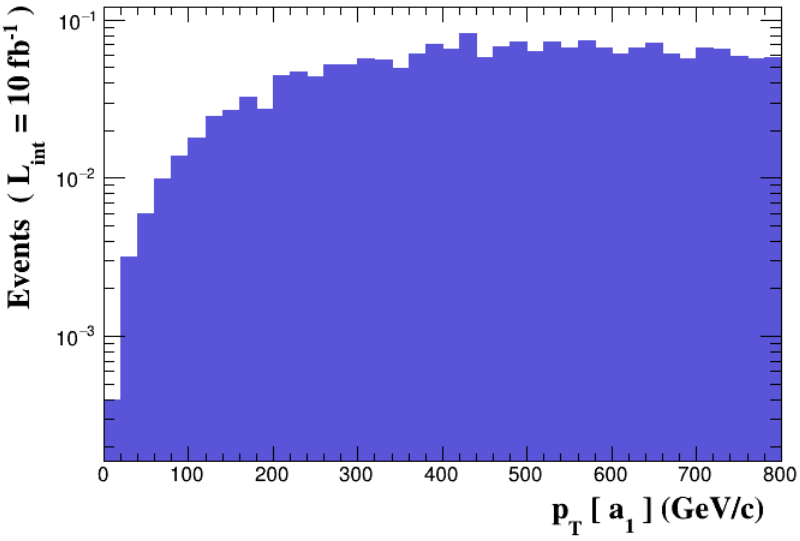

Figure 10.

3.11 Histogram 11

*** Plot: ETA (a[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	-0.00537811	1.088	0.0	0.0

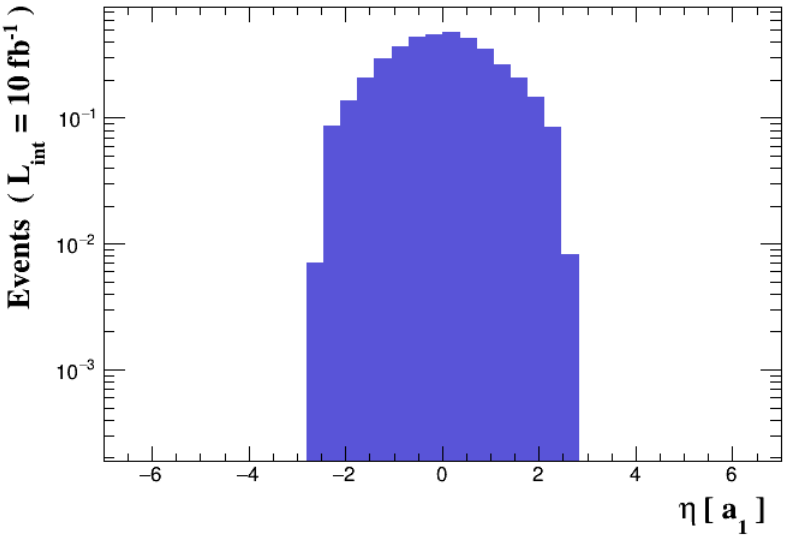

Figure 11.

3.12 Histogram 12

*** Plot: PT (l-[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	451.21	364.9	0.0	22.32

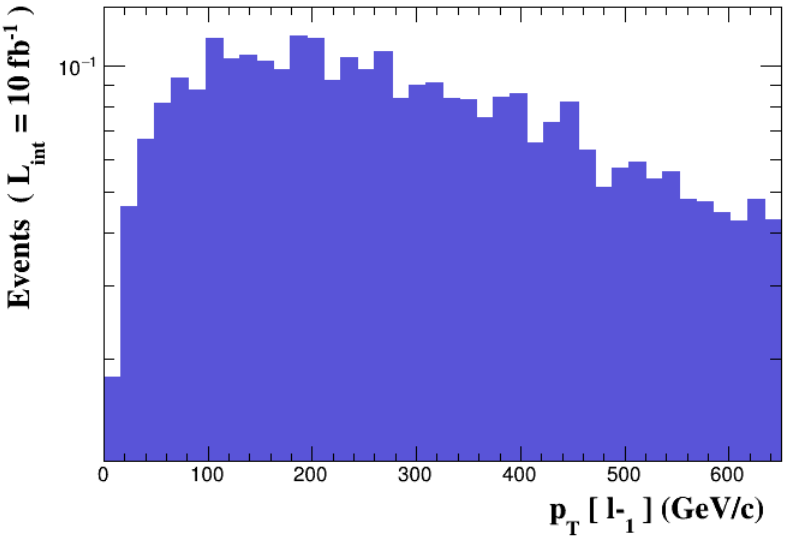

Figure 12.

3.13 Histogram 13

*** Plot: ETA (l-[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	-0.014716	1.22	0.0	0.0

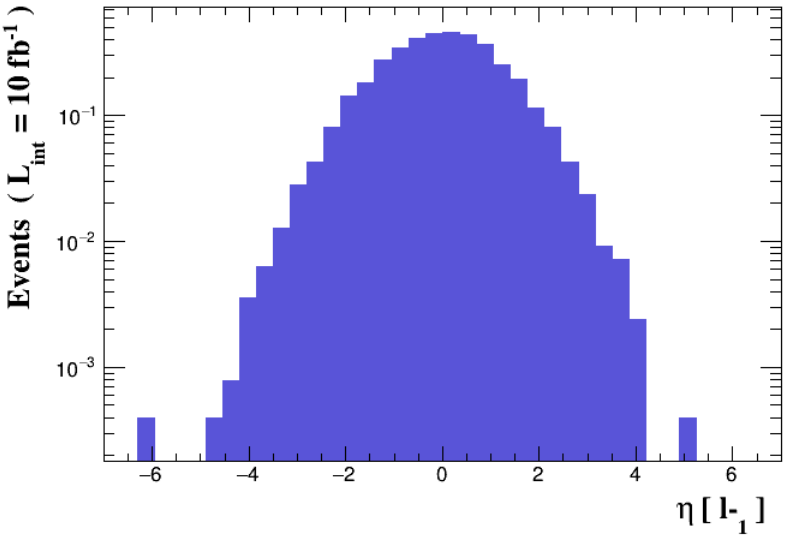

Figure 13.

3.14 Histogram 14

*** Plot: PT (l+[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	448.575	357.0	0.0	22.35

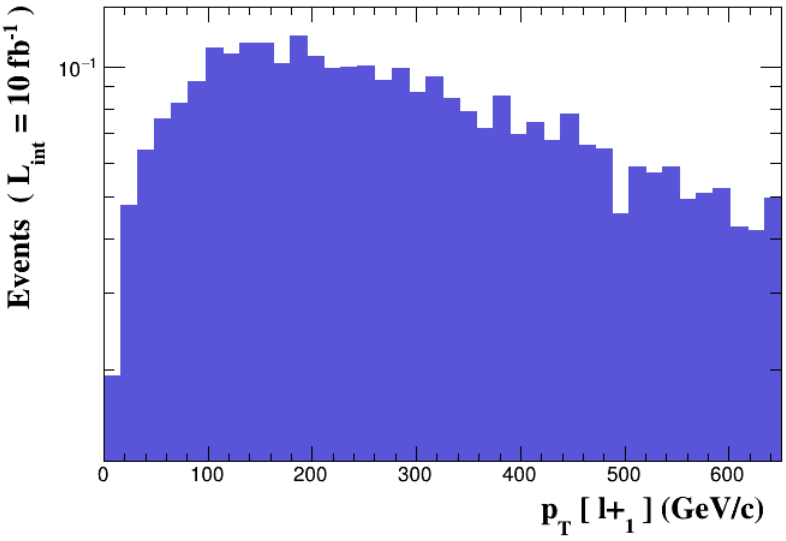

Figure 14.

3.15 Histogram 15

*** Plot: ETA (l+[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	-0.0106603	1.226	0.0	0.0

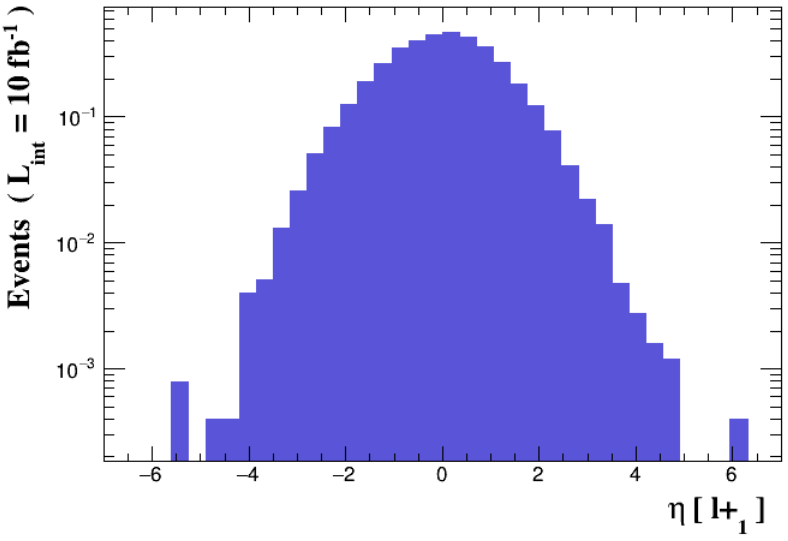

Figure 15.

3.16 Histogram 16

*** Plot: M (a[1] l+[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	1631.31	972.5	0.0	80.18

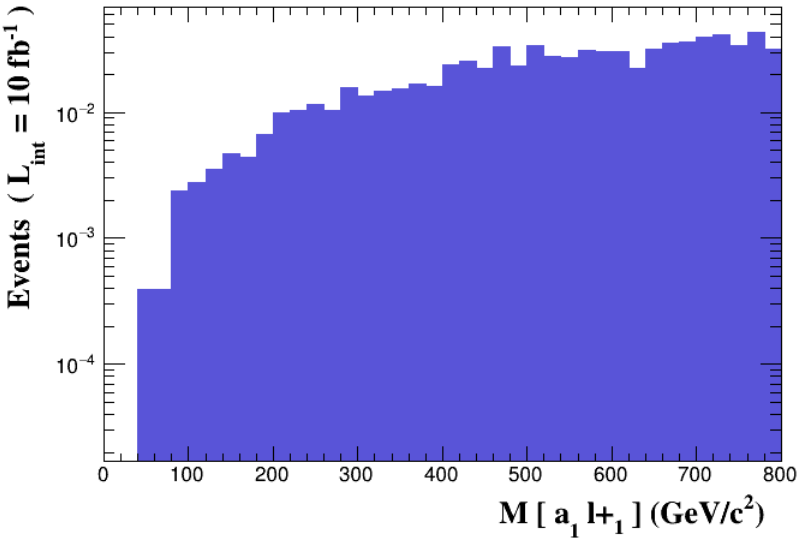

Figure 16.

3.17 Histogram 17

*** Plot: M (a[1] l-[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	1630.43	972.7	0.0	79.85

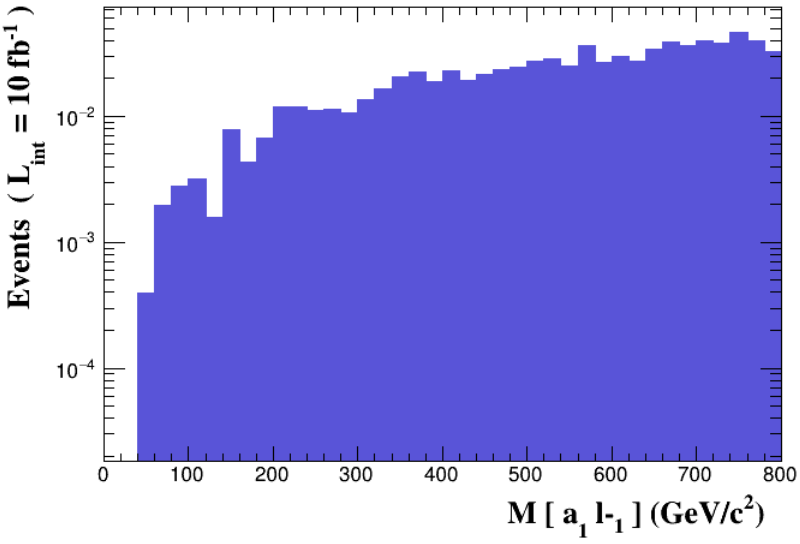

Figure 17.

3.18 Histogram 18

*** Plot: M (a[1] l+[1] l-[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	2381.63	1244	0.0	91.56

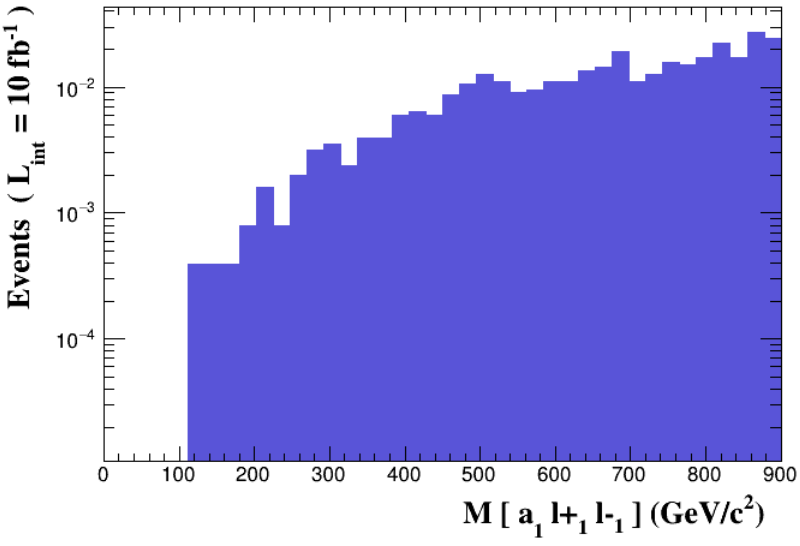

Figure 18.

3.19 Histogram 19

*** Plot: M (l+[1] l-[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	91.2247	5.304	0.0	0.0

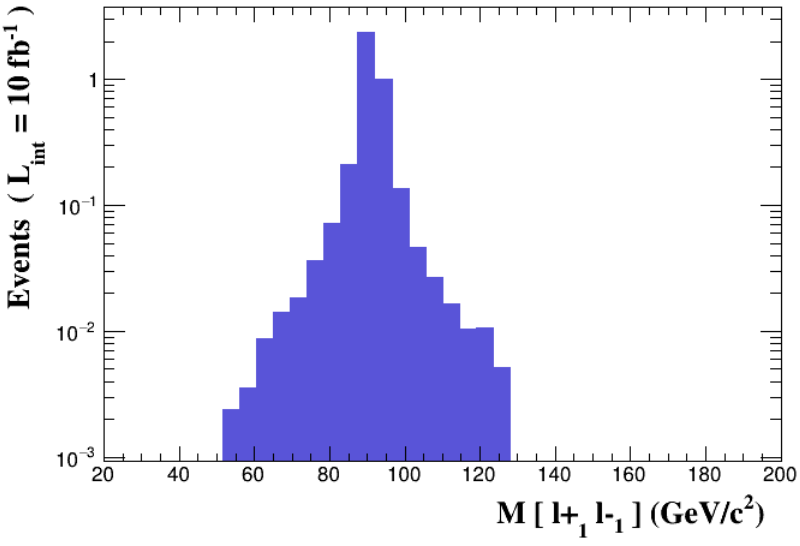

Figure 19.

3.20 Histogram 20

*** Plot: DELTAR (a[1] , l+[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	3.509	0.5487	0.0	0.01

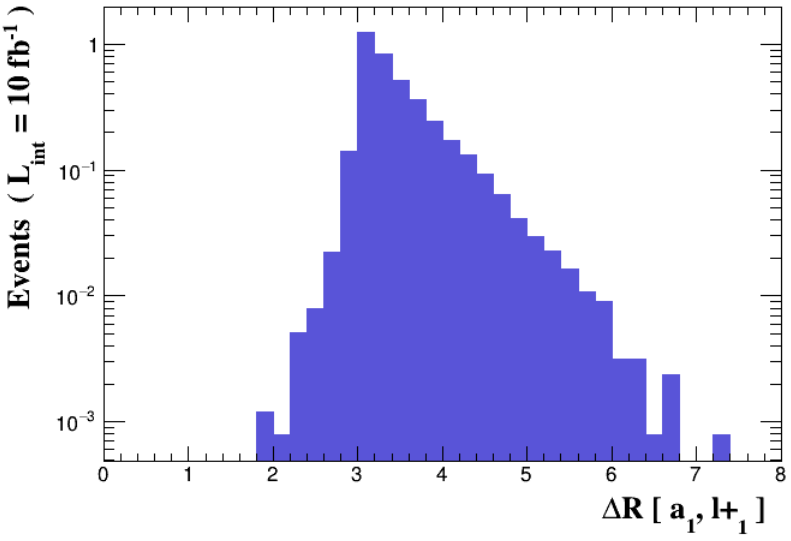

Figure 20.

3.21 Histogram 21

*** Plot: DELTAR (a[1] , l-[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	3.50451	0.5423	0.0	0.0

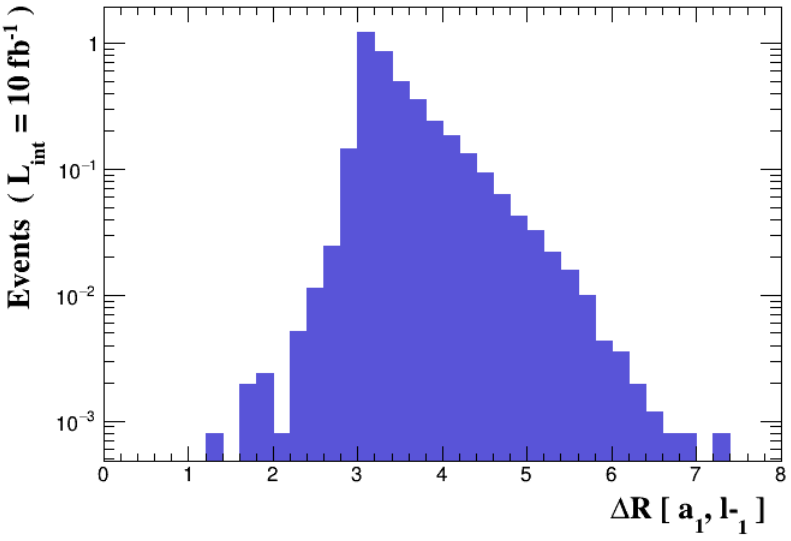

Figure 21.

3.22 Histogram 22

*** Plot: DELTAR (l-[1] , l+[1])**

Dataset	Integral	Entries per event	Mean	RMS	% underflow	% overflow
unweighted_eve	3.96	1.0	0.375916	0.3641	0.0	0.0

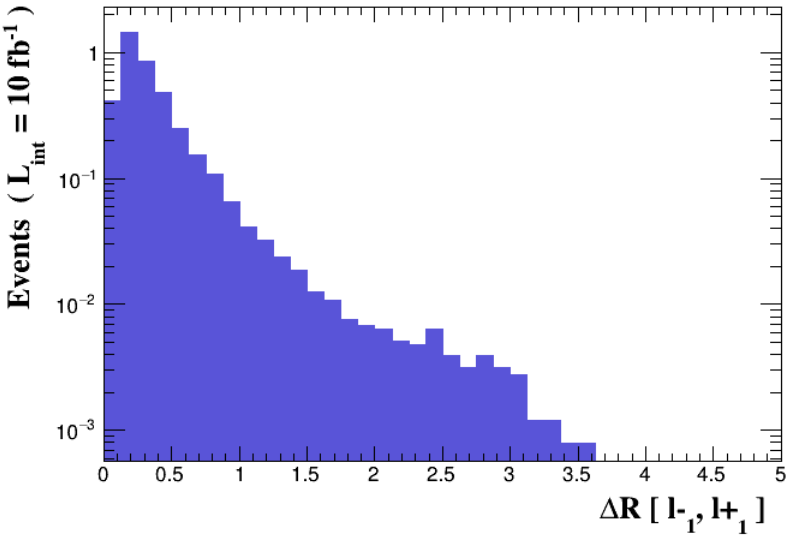

Figure 22.