

MAD *Analysis* **5**

The LaTeX report

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1 Setup

1.1 Command history

```
ma5>import /opt/sbg/cms/ui6_data1/aalloul/MG5_aMC_v2_1_2/pptta2/Events/run_01/-  
tag_1_pythia_events.hep.gz as pptta_had_r04  
ma5>set main.stackng_method = superimpose  
ma5>plot PT(a)  
ma5>plot PT(a[1])  
ma5>plot PT(a[1]) 20 0 200  
ma5>plot PT(a) 20 0 200  
ma5>plot PT(a[1]) 200 0 200  
ma5>plot PT(a) 200 0 200  
ma5>plot PT(a) 200 0 200 [logY]  
ma5>plot PT(a[1]) 200 0 200 [logY]  
ma5>plot PT(a) 200 0 40 [logY]  
ma5>plot PT(a[1]) 200 0 40 [logY]  
ma5>plot DELTAR(a,hadronic) 100 0 1  
ma5>plot DELTAR(a,hadronic) 100 0 0.5  
ma5>submit photon
```

1.2 Configuration

- MadAnalysis version 1.1.11.14 (2014/06/20).
- Histograms given for an integrated luminosity of 10fb^{-1} .

2 Datasets

2.1 pptta_had_r04

- Samples stored in the directory: [/grid_mnt/opt_sbg_cms_ui6_data1/aalloul/-LRsusy/v1.1.10beta](#) .
- Sample consisting of: [signal](#) events.
- Generated events: [9998](#) events.
- Normalization to the luminosity: [9366 +/- 0](#) events.
- Ratio (event weight): [0.94](#) .

Path to the event file	Nr. of events	Cross section (pb)	Negative wgts (%)
/opt/sbg/cms/-ui6_data1/aalloul/-MG5_aMC_v2_1_2/-pptta2/Events/run_01/-tag_1_pythia_events.hep.gz	9998	0.937	0.0

3 Histos and cuts

3.1 Histogram 1

* Plot: PT (a)

Table 1. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	12354	1.32	36.592	54.2	0.0	0.0

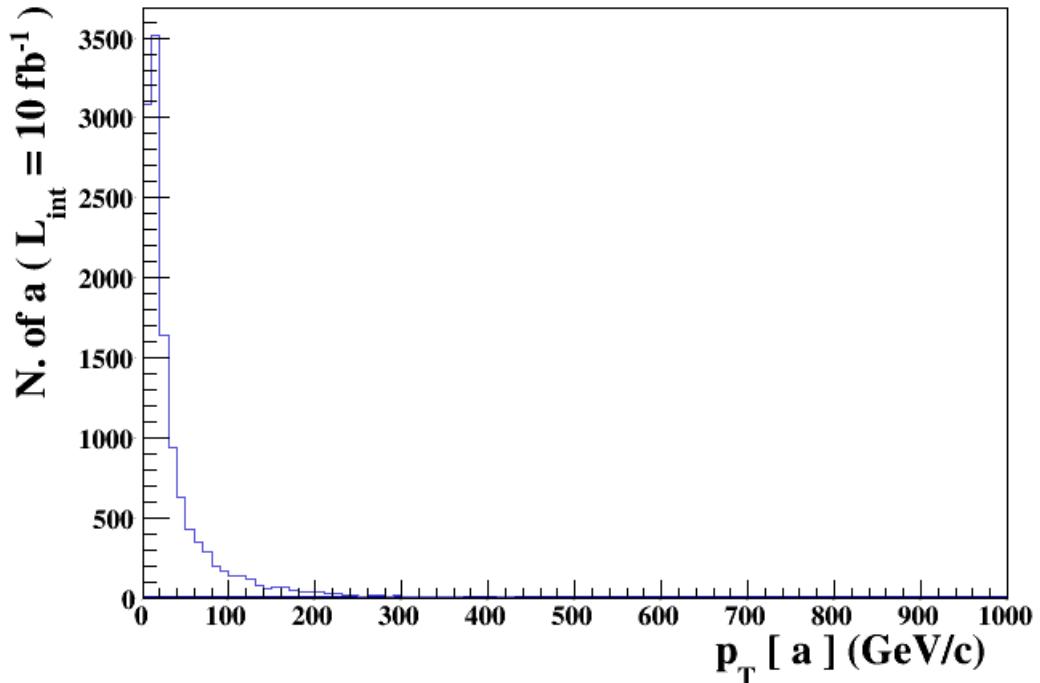


Figure 1.

3.2 Histogram 2

* Plot: PT (a[1])

Table 2. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	9366	1.0	47.3537	58.08	0.0	0.0

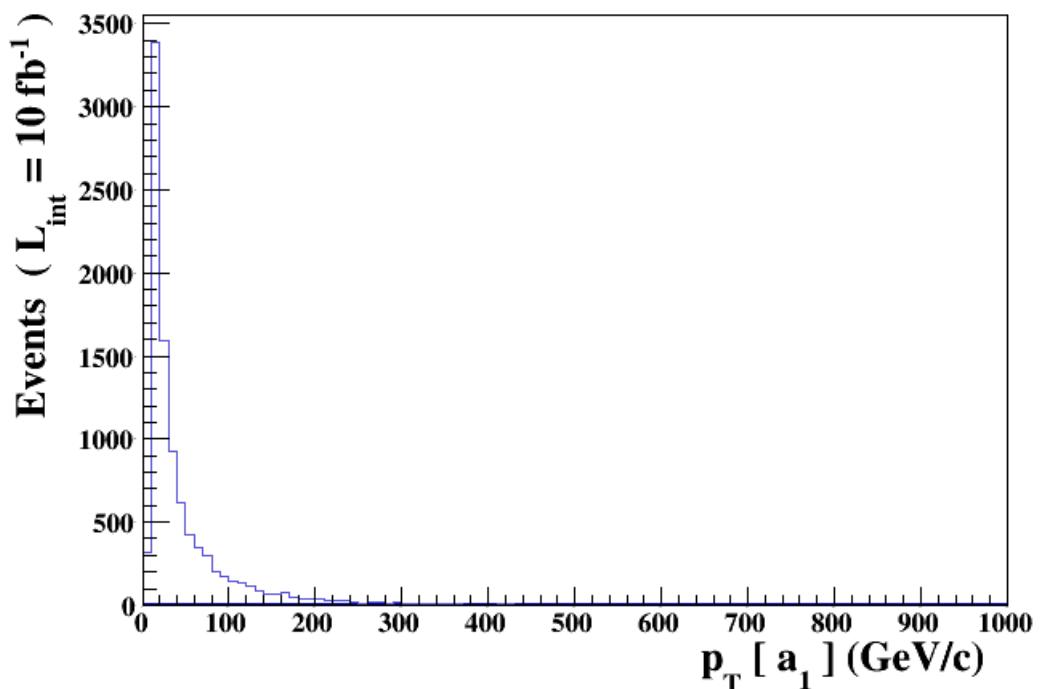


Figure 2.

3.3 Histogram 3

* Plot: PT (a[1])

Table 3. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	9366	1.0	47.3537	58.08	0.0	3.131

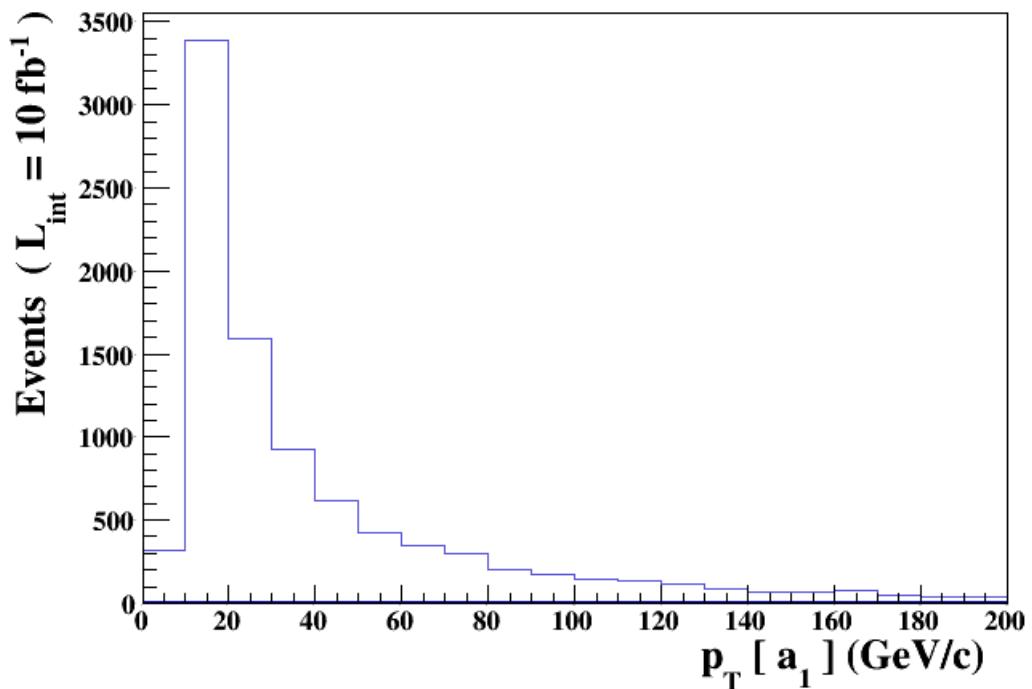


Figure 3.

3.4 Histogram 4

* Plot: PT (a)

Table 4. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	12354	1.32	36.592	54.2	0.0	2.374

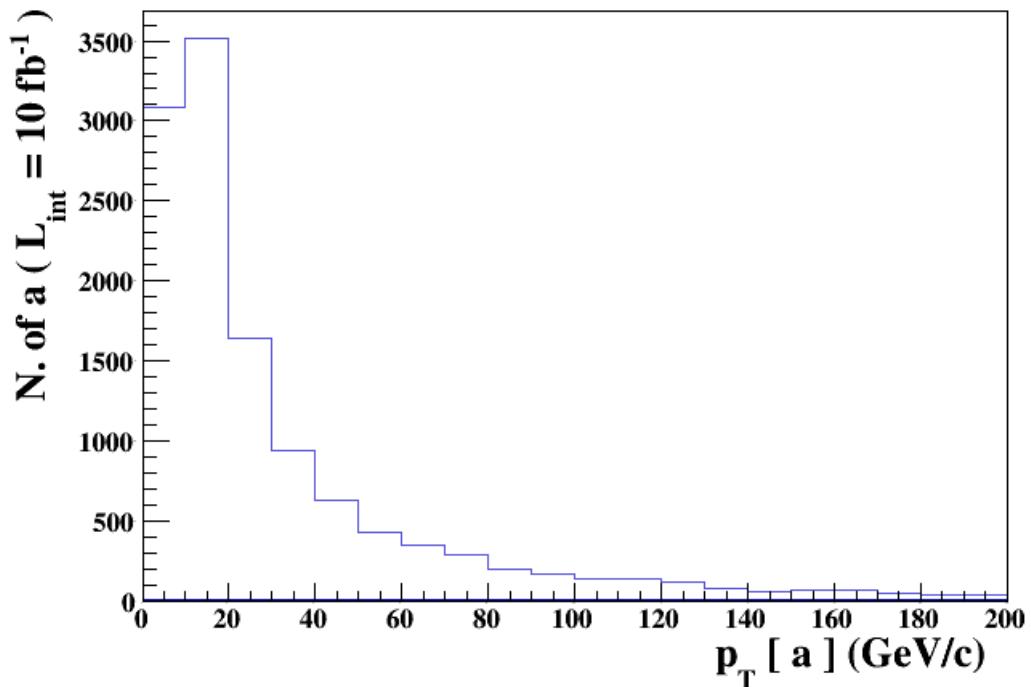


Figure 4.

3.5 Histogram 5

* Plot: PT (a[1])

Table 5. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	9366	1.0	47.3537	58.08	0.0	3.131

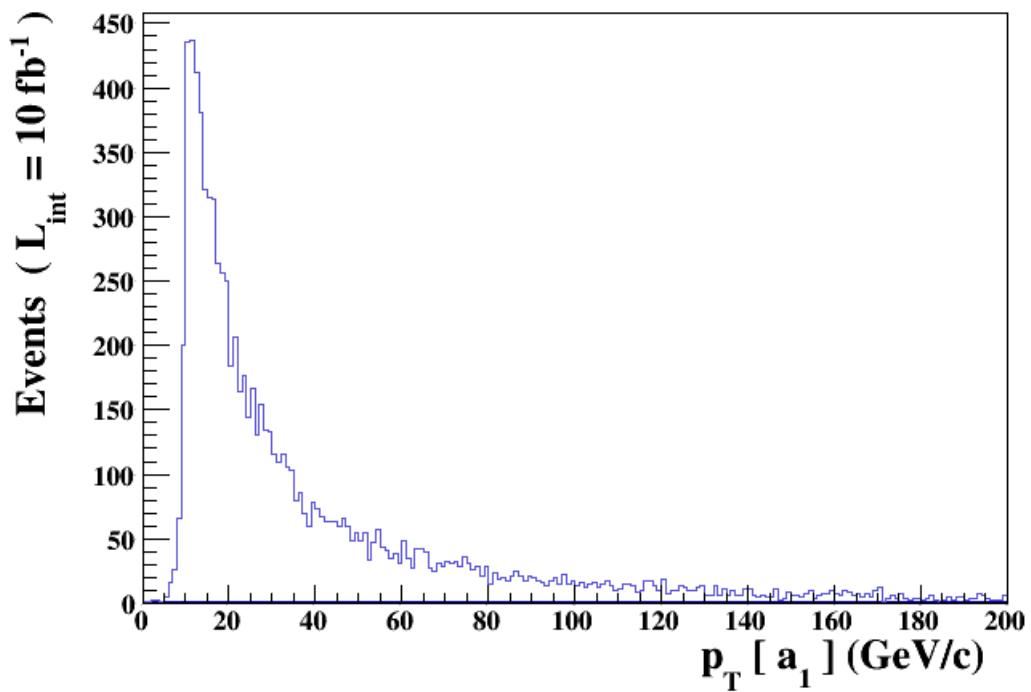


Figure 5.

3.6 Histogram 6

* Plot: PT (a)

Table 6. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	12354	1.32	36.592	54.2	0.0	2.374

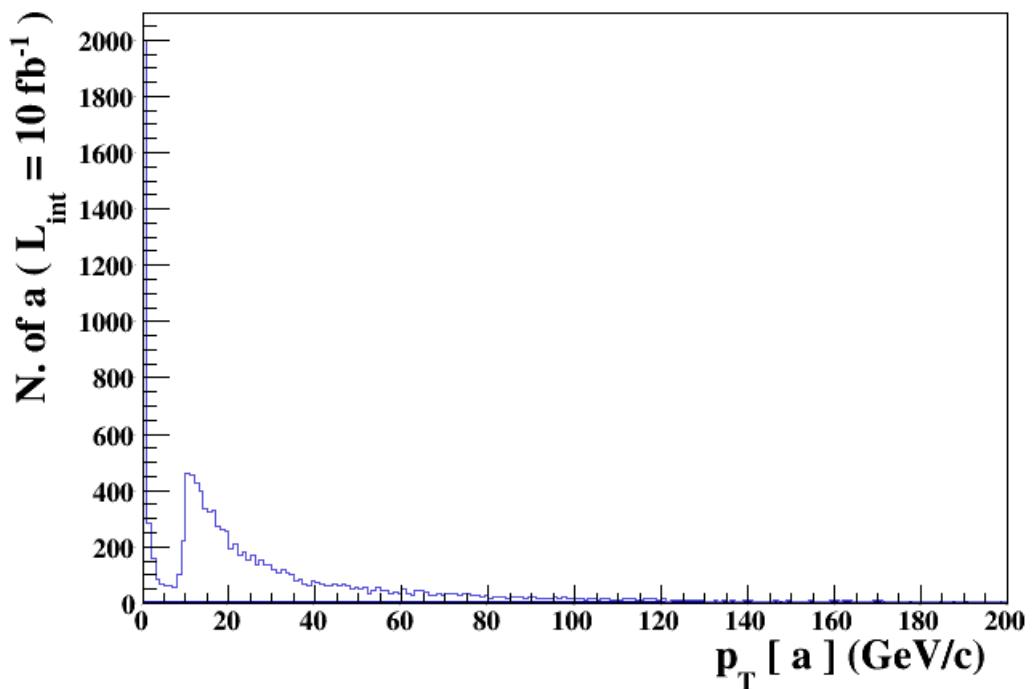


Figure 6.

3.7 Histogram 7

* Plot: PT (a)

Table 7. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	12354	1.32	36.592	54.2	0.0	2.374

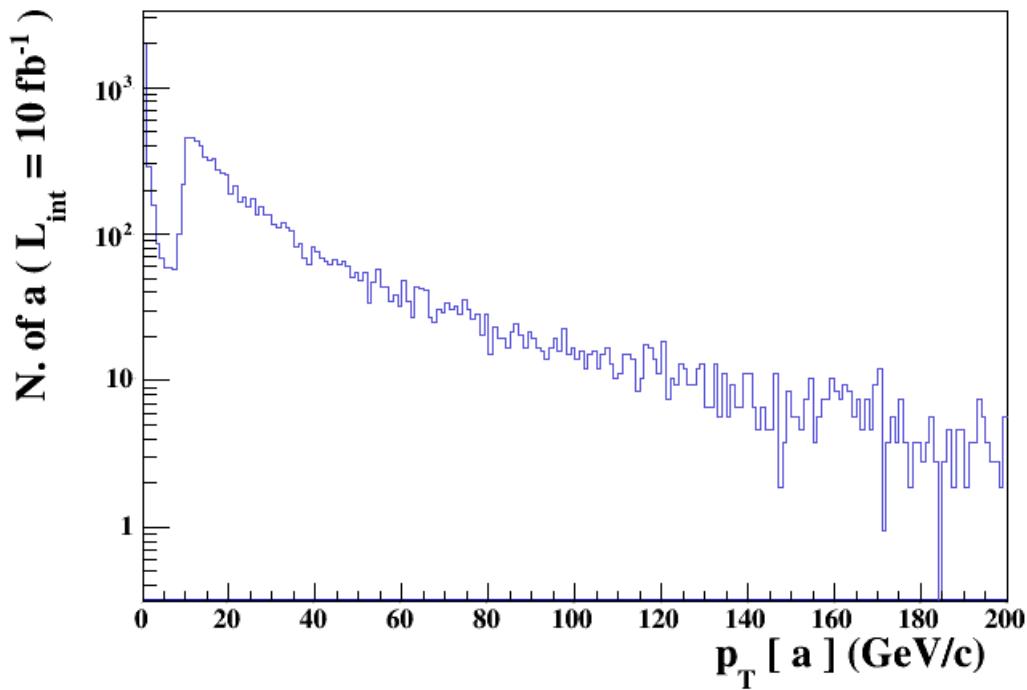


Figure 7.

3.8 Histogram 8

* Plot: PT (a[1])

Table 8. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	9366	1.0	47.3537	58.08	0.0	3.131

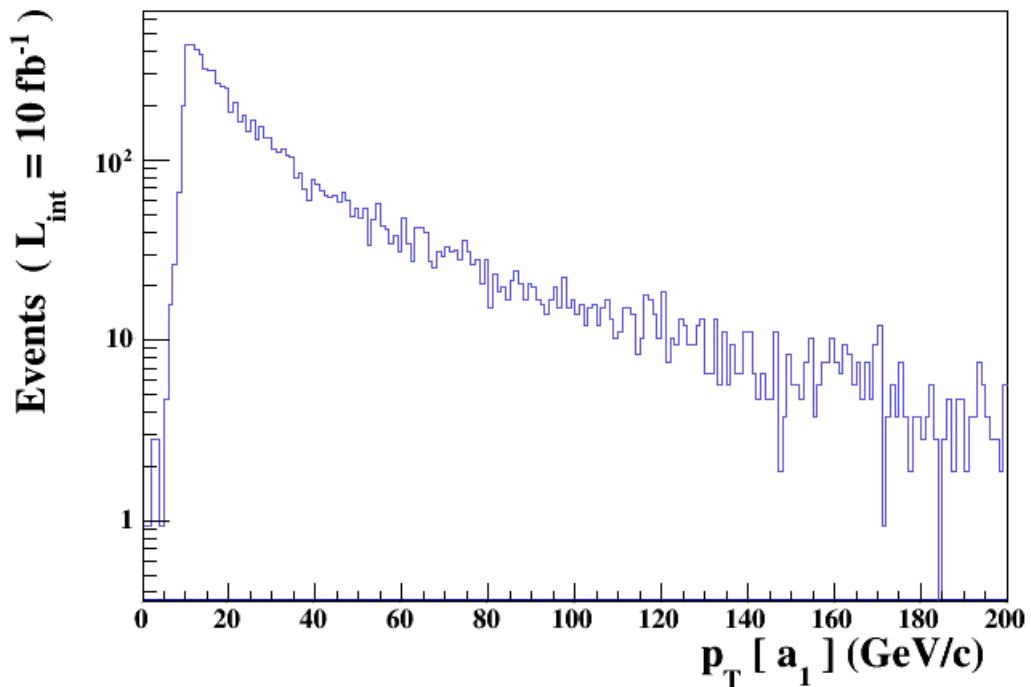


Figure 8.

3.9 Histogram 9

* Plot: PT (a)

Table 9. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	12354	1.32	36.592	54.2	0.0	25.67

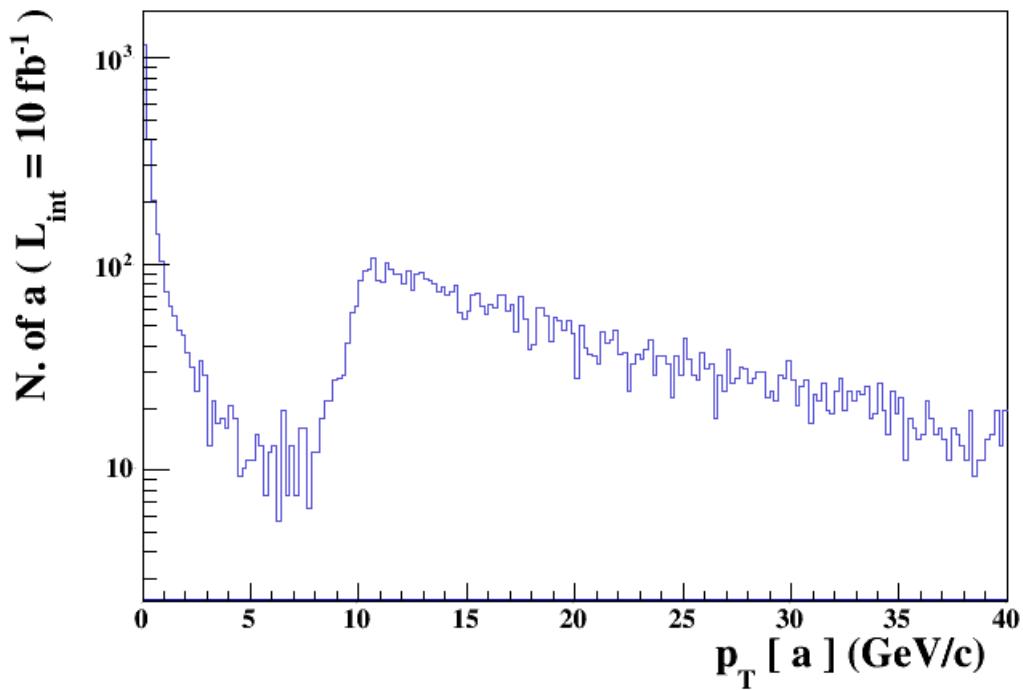


Figure 9.

3.10 Histogram 10

* Plot: PT (a[1])

Table 10. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	9366	1.0	47.3537	58.08	0.0	33.56

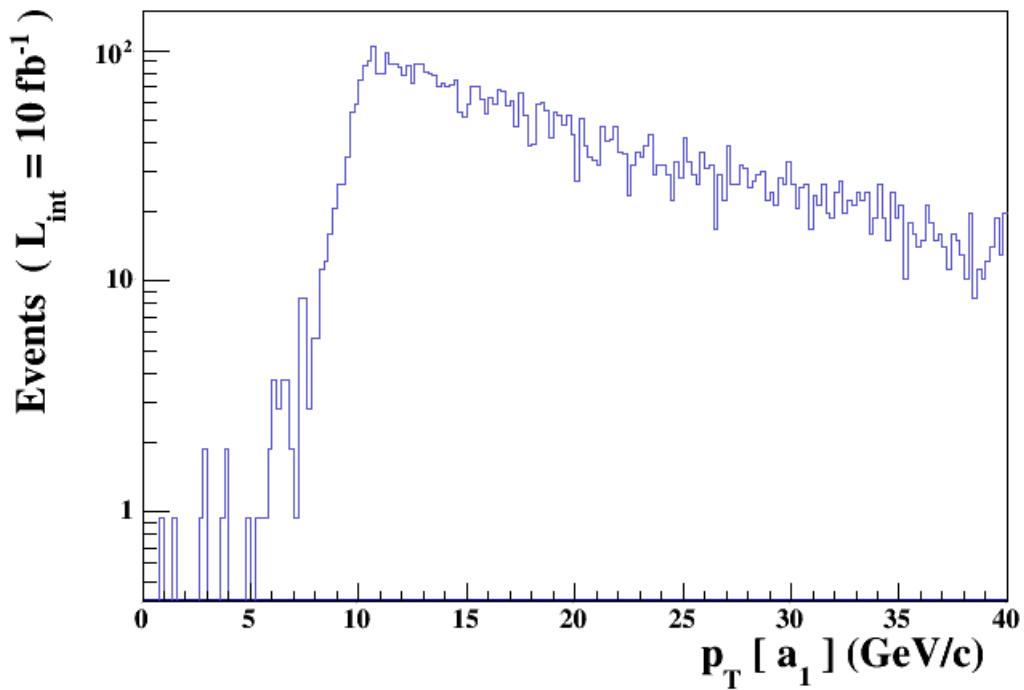


Figure 10.

3.11 Histogram 11

* Plot: DELTAR (a , hadronic)

Table 11. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	32791	3.5	7.44857	4.148	0.0	83.34

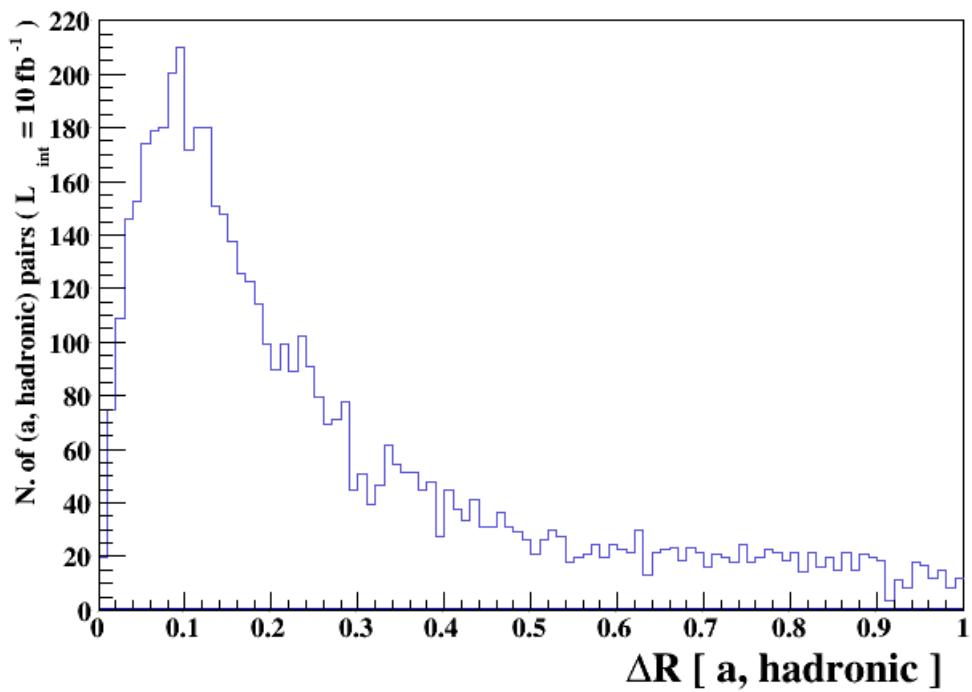


Figure 11.

3.12 Histogram 12

* Plot: DELTAR (a , hadronic)

Table 12. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underflow	%Overflow
pptta_had	32791	3.5	7.44857	4.148	0.0	86.26

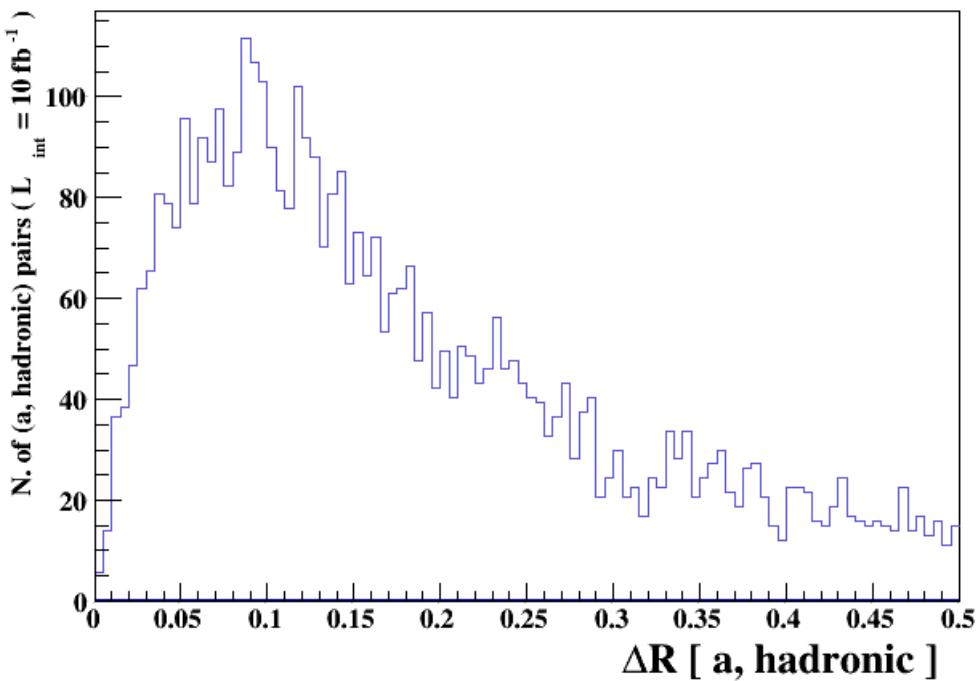


Figure 12.