

MAD *Analysis* **5** The LaTeX report

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1 Setup

1.1 Command history

```
ma5>import /home/jose/MC_Studies/MG5_aMC_v2_5_1/TTbar_dimuonchannel/Events/-  
run_01/unweighted_events.lhe.gz  
ma5>define MU = mu+ mu-  
ma5>plot ETA(MU)  
ma5>plot PT(MU)  
ma5>submit TTbarDimuonChannel_MuonsInfo
```

1.2 Configuration

- MadAnalysis version 1.4 (2016/07/20).
- Histograms given for an integrated luminosity of 10fb^{-1} .

2 Datasets

2.1 defaultset

- Samples stored in the directory: `/home/jose/MC_Studies/madanalysis5` .
- Sample consisting of: `signal` events.
- Generated events: `1000` events.
- Normalization to the luminosity: `56904 +/- 443` events.
- **Ratio (event weight): 56 - warning: please generate more events (weight larger than 1)!**

Path to the event file	Nr. of events	Cross section (pb)	Negative wgts (%)
<code>/home/jose/MC_Studies/-MG5_aMC_v2_5_1/-TTbar_dimuonchannel/-Events/run_01/-unweighted_events.lhe.gz</code>	1000	5.69 @ 0.78%	0.0

3 Histos and cuts

3.1 Histogram 1

* Plot: ETA (mu)

Table 1. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underfl	%Overflow
defaultset	113809	2.0	-0.00794128	1.521	0.0	0.0

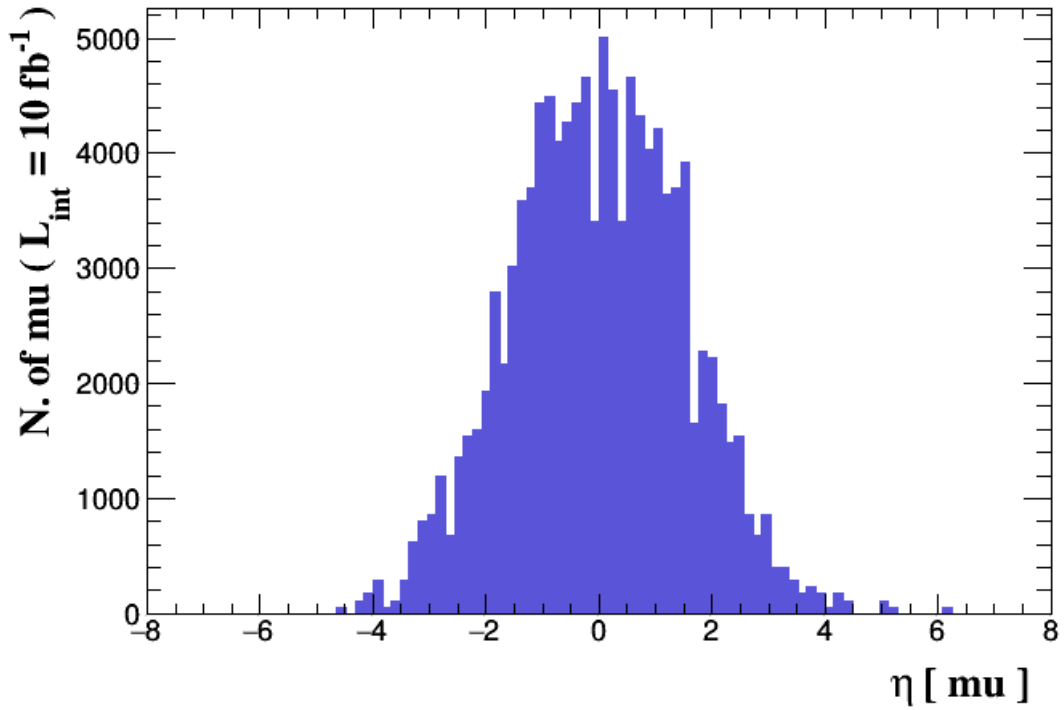


Figure 1.

3.2 Histogram 2

* Plot: PT (mu)

Table 2. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underfl	%Overflow
defaultset	113809	2.0	52.1983	40.49	0.0	0.0

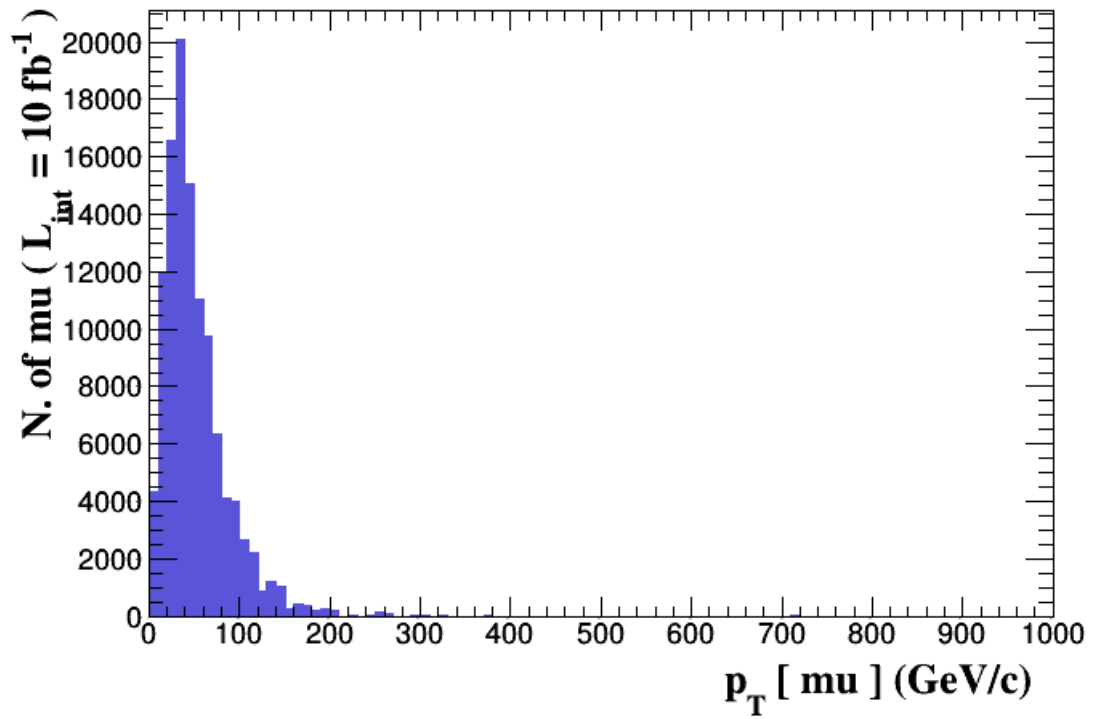


Figure 2.