The LaTeX report

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1 Setup

1.1 Command history

```
 ma5>set main.fastsim.package = delphes
ma5>set main.fastsim.detector = atlas
ma5># luminosity in fb^-1
ma5>set main.lumi = 3.2
ma5># set variable to normalize plots by
ma5>set main.normalize = lumi
ma5>set main.outputfile = "eshtest.lhe"
ma5># import the signal/background files
ma5>import ppttbar_pythia_events.hep.gz as ppttbar
ma5>import ppWjets_pythia_events.hep.gz as ppWjets
ma5>import ppZjets_pythia_events.hep.gz as ppZjets
ma5># declare the imported files as signal/background
ma5>set ppttbar.type = background
ma5>set ppWjets.type = background
ma5>set ppZjets.type = background
ma5># plot Jet.Eta N_NBINS X_MIN X_MAX
ma5>plot ETA(j) 30 -5 5
ma5>submit eshtest
```

1.2 Configuration

- MadAnalysis version 1.4 (2016/07/20).
- Histograms given for an integrated luminosity of 3.2fb^{-1}.

2 Datasets

2.1 ppttbar

- Sample consisting of: background events.
- Generated events: 100000 events.
- Normalization to the luminosity: 1615625+/- 0 events.
- Ratio (event weight): 16 - warning: please generate more events (weight larger than 1)!

Path to the event file	Nr. of events	Cross section (pb)	Negative wgts (%)
ppttbar_pythia_events.hep.g	100000	504	0.0

2.2 ppwjets

- Sample consisting of: background events.
- Generated events: 100000 events.
- Normalization to the luminosity: 68605120+/- 0 events.
- Ratio (event weight): 686 - warning: please generate more events (weight larger than 1)!

Path to the event file	Nr. of events	Cross section (pb)	Negative wgts (%)
ppWjets_pythia_events.hep.	100000	21439	0.0

2.3 ppzjets

- Sample consisting of: background events.
- Generated events: 100000 events.
- Normalization to the luminosity: 37315840+/- 0 events.
- Ratio (event weight): 373 - warning: please generate more events (weight larger than 1)!

Path to the event file	Nr. of events	Cross section (pb)	Negative wgts (%)
ppZjets_pythia_events.hep.g	100000	11661	0.0

3 Histos and cuts

3.1 Histogram 1

*** Plot: ETA (j)**

Table 1. Statistics table

Dataset	Integral	Entries / events	Mean	RMS	%Underfl	%Overflow
ppttbar	8372543	5.18	-0.000937121	1.6	0.0	0.0
ppwjets	161665907	2.36	0.00189891	2.139	0.0	0.0
ppzjets	90996914	2.44	0.0104403	2.037	0.0	0.0

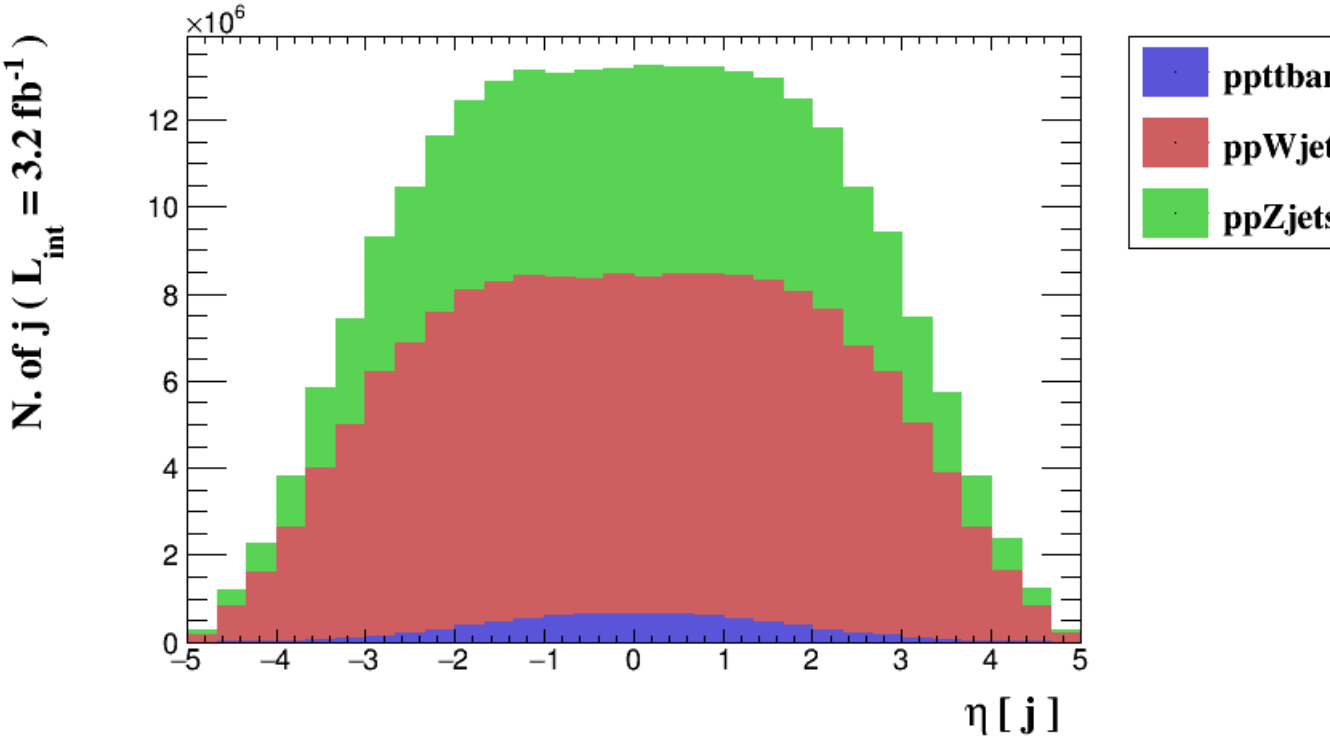

Figure 1.