



## The LaTeX report

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# 1 Setup

## 1.1 Command history

```
ma5>import ../../../../DarkPhotonSignalTest/Events/run_01/unweighted_events.lhe
ma5>plot dR(a e-) 100 0 5
ma5>submit DRtest
ma5>plot dR(dP) 100 0 5
ma5>plot dR(dp) 100 0 5
ma5>import
ma5>display_multiparticles
ma5>define
ma5>plot dR(a) 100 0 5
ma5>plot PT(a) 100 0 0.05
ma5>submit DRtest2
```

## 1.2 Configuration

- MadAnalysis version 1.1.11 (2014/09/15).
- Histograms given for an integrated luminosity of  $10\text{fb}^{-1}$ .

## 2 Datasets

### 2.1 defaultset

- Samples stored in the directory: [/media/sf\\_darkphotons/madgraph/madanalysis/-madanalysis5/bin](#) .
- Sample consisting of: [signal](#) events.
- Generated events: [100000](#) events.
- Normalization to the luminosity: [316687+/- 107](#) events.
- **Ratio (event weight): 3.2 - warning: please generate more events (weight larger than 1)!**

Path to the event file	Nr. of events	Cross section (pb)	Negative wgts (%)
/media/sf_darkphotons/-madgraph/-DarkPhotonSignalTest/-Events/run_01/-unweighted_events.lhe	100000	31.7 @ 0.034%	0.0

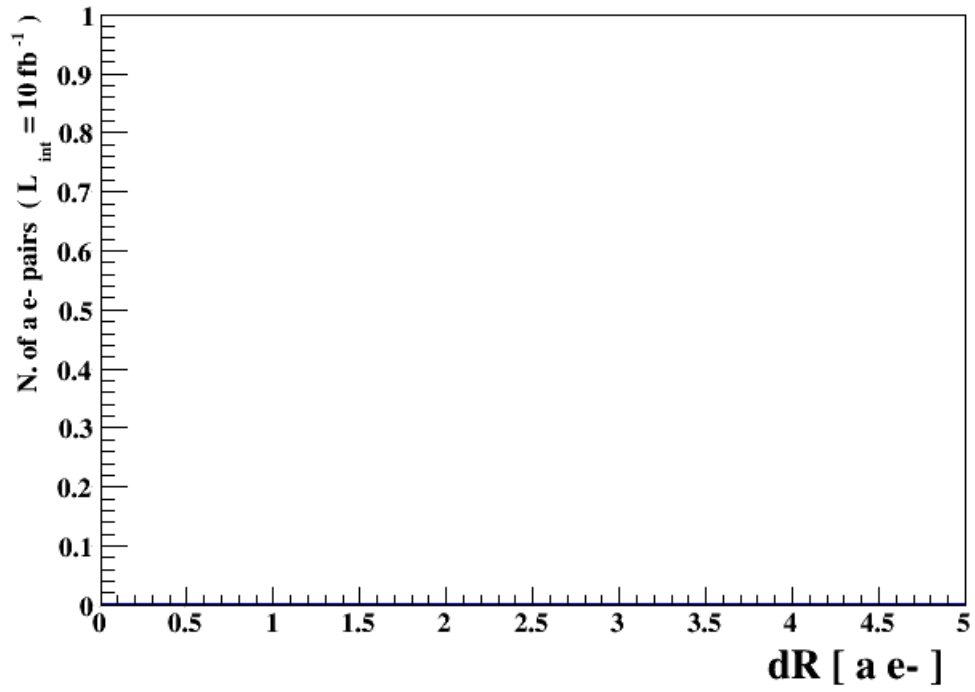
### 3 Histos and cuts

#### 3.1 Histogram 1

\* Plot:  $dR$  ( a e- )

**Table 1.** Statistics table

Dataset	Integral	Entries events	/	Mean	RMS	%Underflow	%Overflow
defaultset	0.0 +/- 0.0	0.0		0.0	0.0	0.0	0.0



**Figure 1.**

### 3.2 Histogram 2

\* Plot: PT ( a )

**Table 2.** Statistics table

Dataset	Integral	Entries events	/	Mean	RMS	%Underflow	%Overflow
defaultset	316687	1.0		0.0146948	0.01014	0.0	0.0

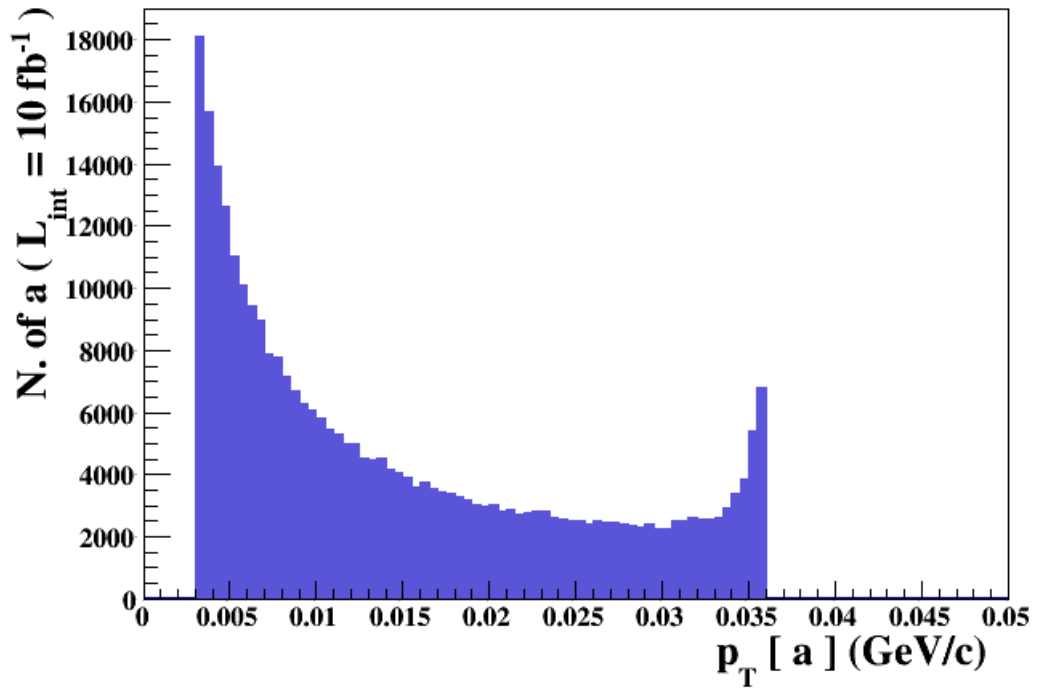


Figure 2.