

Some notes on the two kinds of cuts we use for MadGraph event generation in APEX...

Natalia Toro
March 18, 2015

The configurations for the cut files, sent by Rouven on Dec 11, 2014, are in github:

`apexSearchTools/configurationSamples/...`

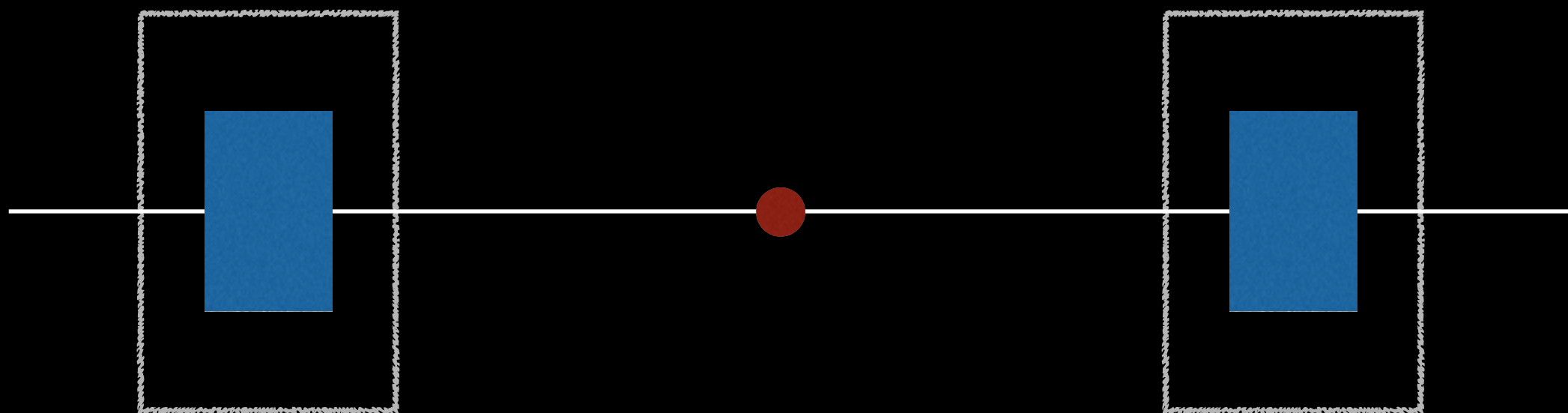
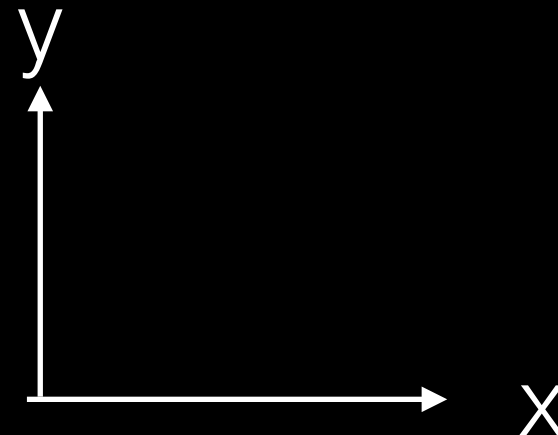
(these versions are appropriate for 2.262 GeV beam energy. The `ef`, `xef`, `efmax`, and `mmff` values should be scaled in proportion to beam energies)



MadGraph cuts



Spectrometer angular acceptance



“Rectangular” cut mode
(use $\theta_{x\min}/\theta_{x\max}$, $\theta_{y\min}/\theta_{y\max}$)



MadGraph cuts



Spectrometer angular acceptance



Rotated spectrometer pairs

“Annulus” cut mode
(use $\theta_{\text{tamin/max}}$, m_{mff})

