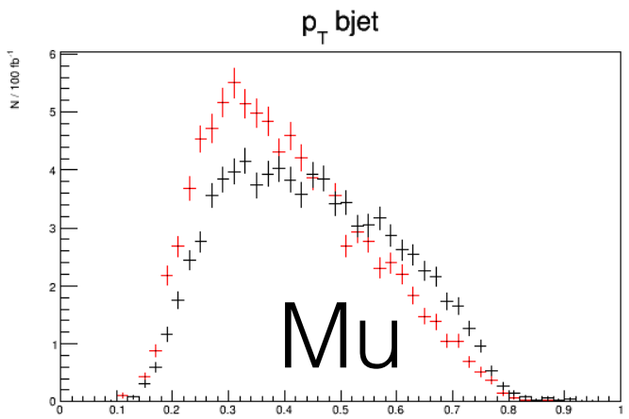
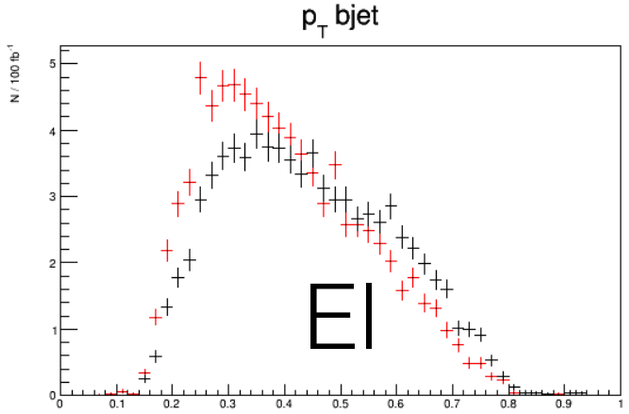
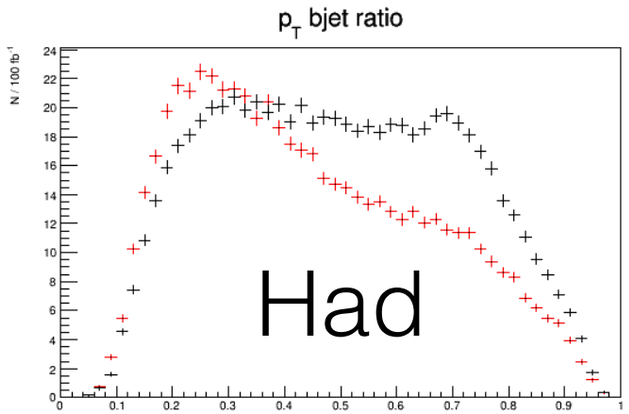
Overview

- Use 100/fb and counts from distributions on the right
- simulated experiments at various luminosities and found alpha value/ CLs for 50% power
- i.e. how well you can exclude one model at the peak of the second model







Ryan Mueller

Mu

- 2 sigma: .0455
- 3 sigma: .0027

Lumi	alphaR/ BetaL	alphaL/ BetaR	averag e
2.51188	0.804566	7.42E-01	0.773048
6.30957	0.667638	5.98E-01	0.6328725
15.8489	0.531607	3.75E-01	0.4533935
39.8106	0.309608	0.229913	0.2697605
99.9997	0.0855049	0.0792727	0.0823888

el

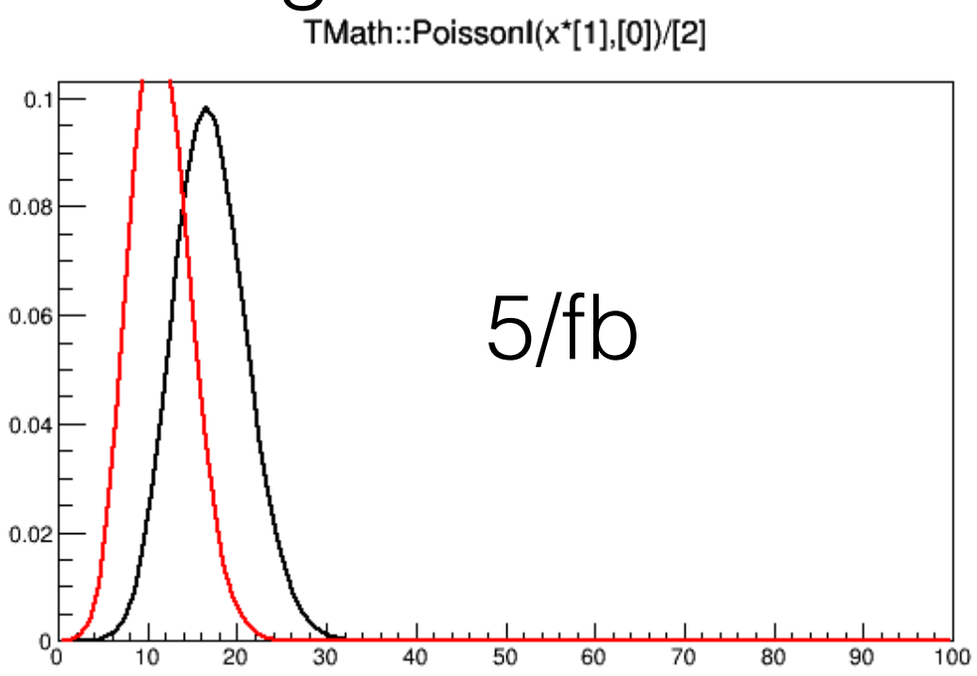
Lumi	alphaR/ BetaL	alphaL/ BetaR	averag e
2.51188	1.23516	1.54E+00	1.386075
6.30957	0.742379	4.66E-01	0.60423
15.8489	0.580161	4.79E-01	0.529619
39.8106	0.379418	0.381018	0.380218
99.9997	0.170935	0.122029	0.146482

- 2 sigma: .0455
- 3 sigma: .0027

Had

Lumi	alphaR/ BetaL	alphaL/ BetaR	averag e
2.51188	0.23783	3.6E-01	0.298969
6.30957	0.0852482	8.62E-02	0.0857266
15.8489	0.00511265	8.62E-03	0.00686648
39.8106	1.14E-05	3.86E-05	2.50E-05
99.9997	2.52E-12	5.88E-11	3.07E-11

- 2 sigma: .0455
- 3 sigma: .0027



5/fb