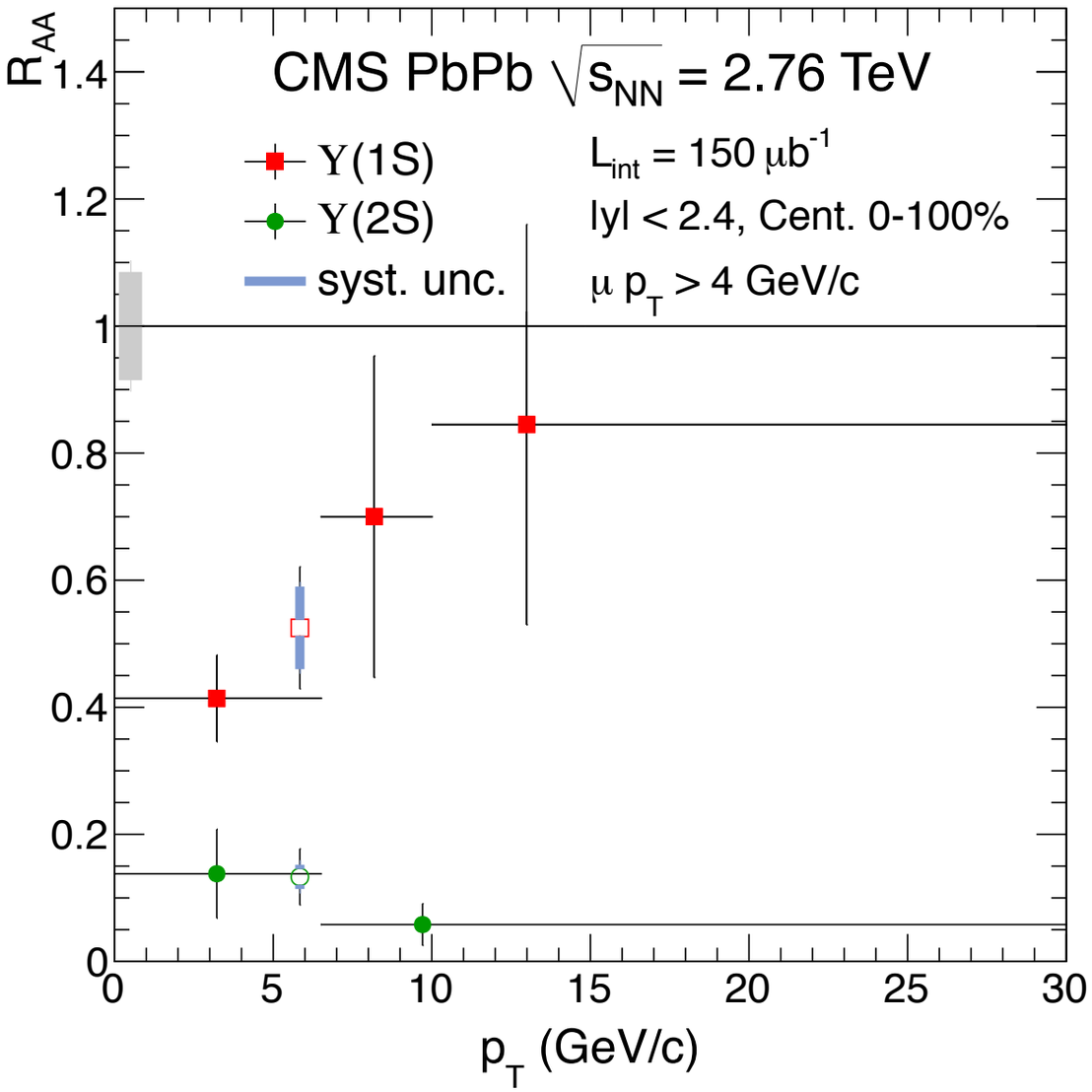
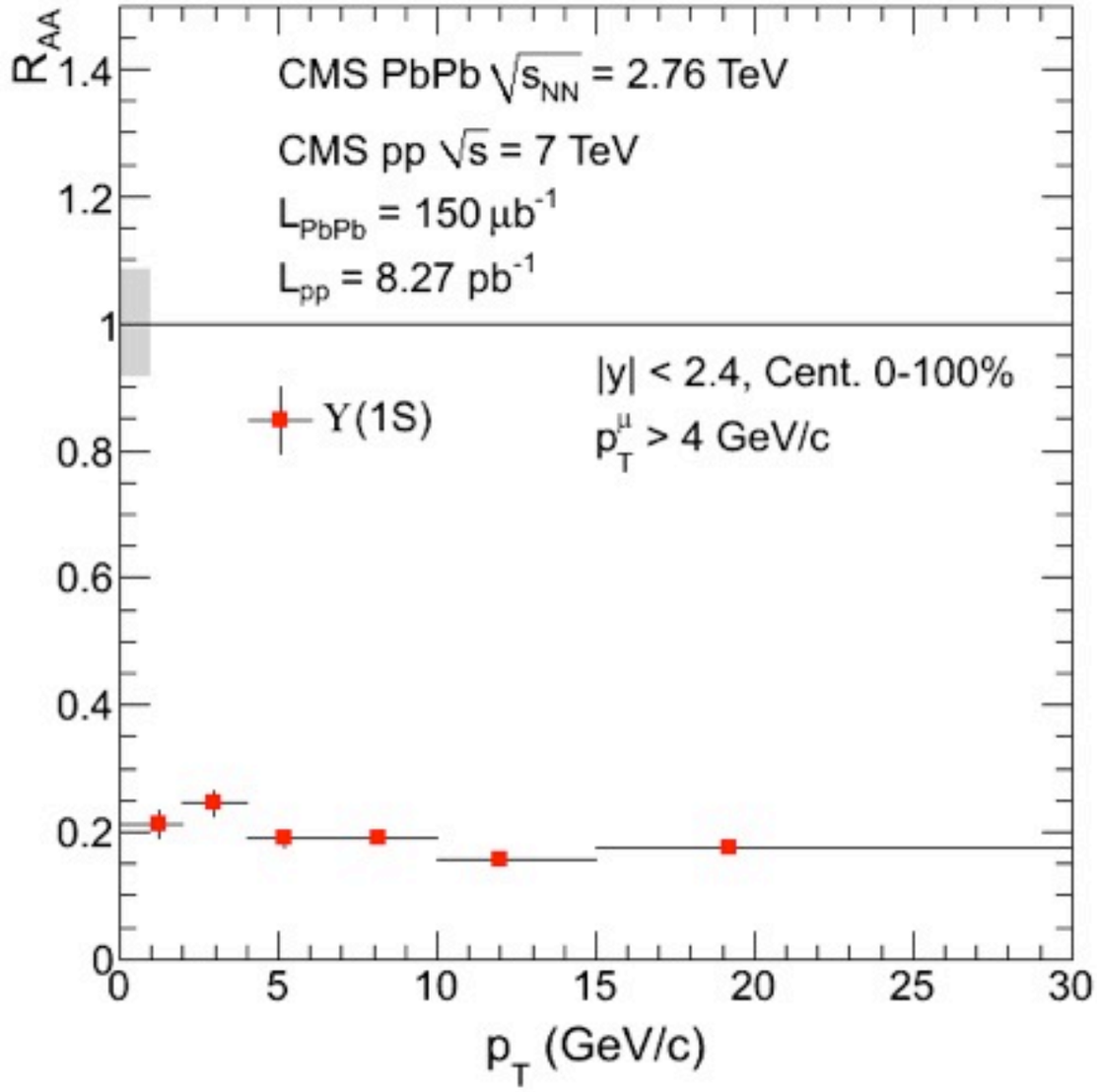
p_T Results/UPC Jpsi

Guillermo Breto Rangel

Dilepton meeting (9-12-12)

R_{AA} (2.76 TeV both pp and PbPb)

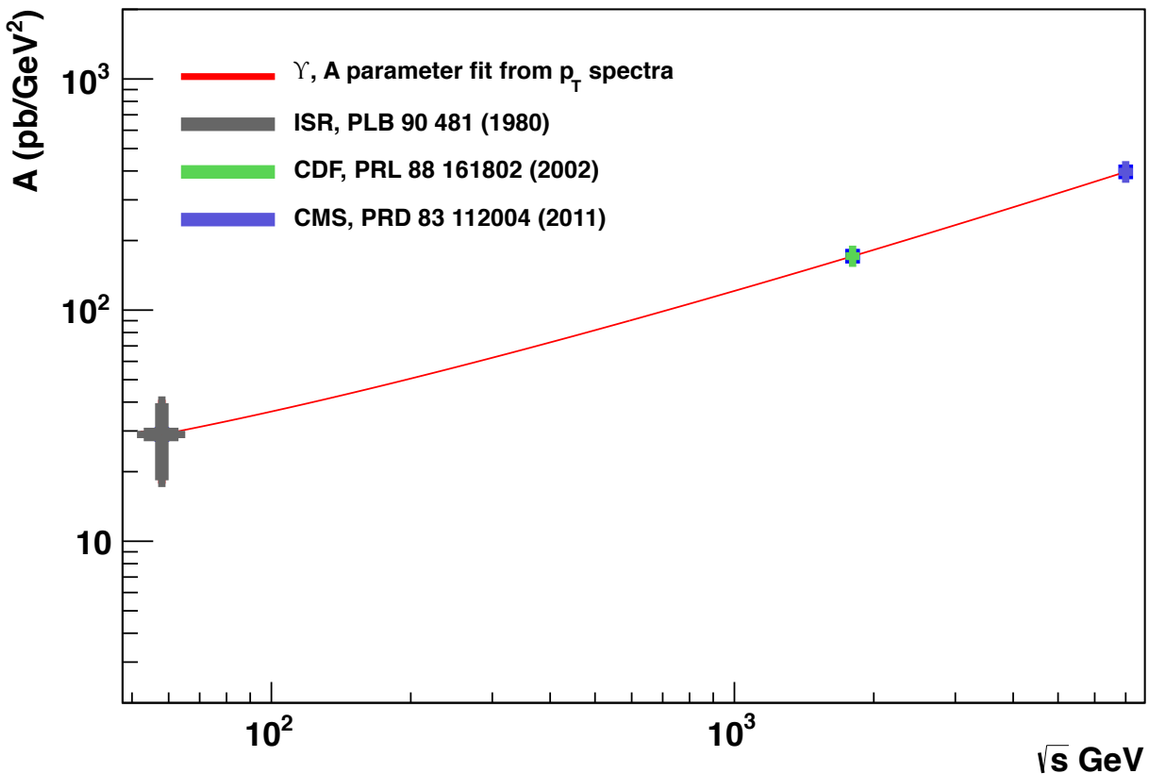


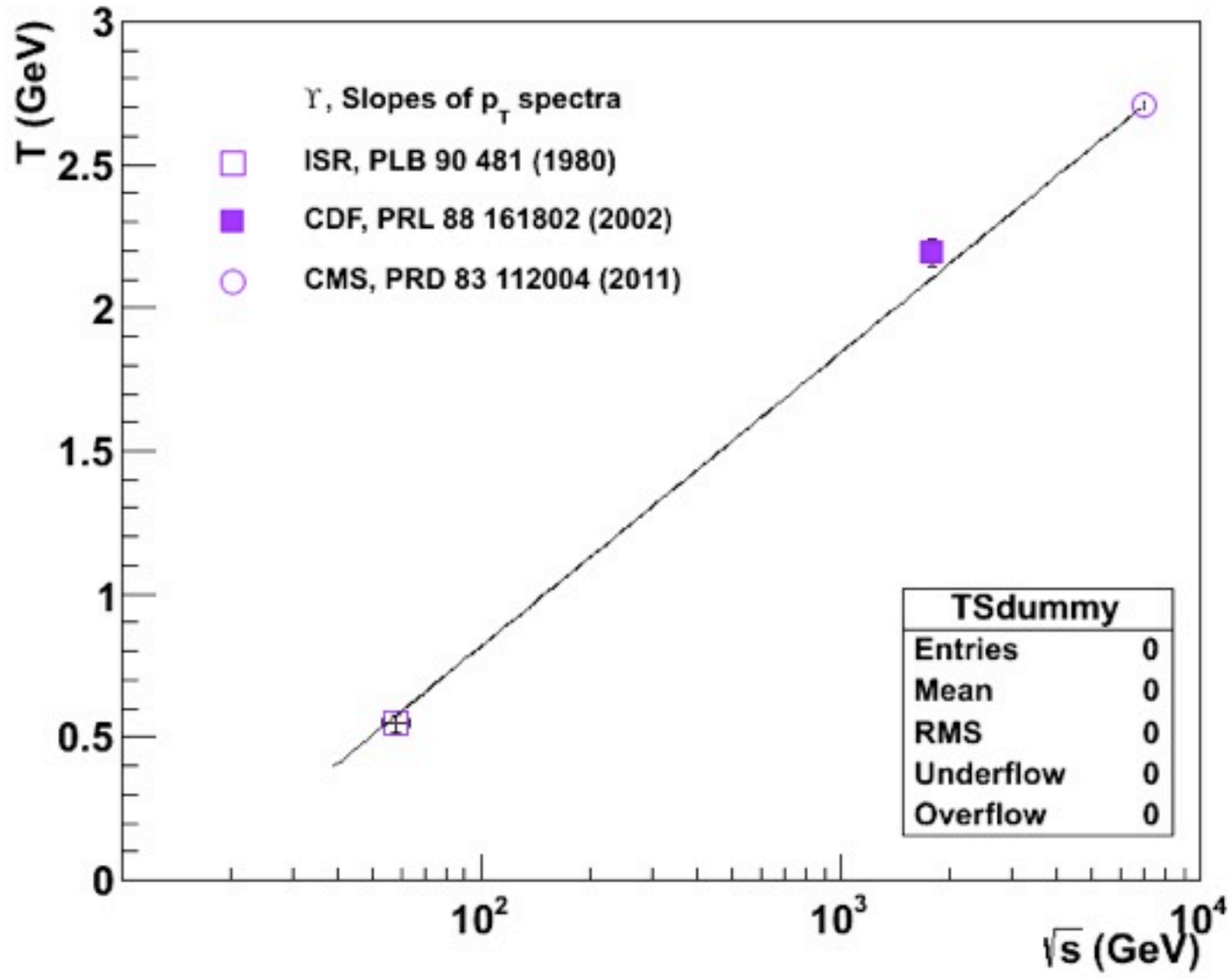


A and T paramter

dsigma/dpt = A*pT/(exp(pT/T)+1)

A as funtion of $\sqrt{s}$





FCN=2.1826e-07 FROM MIGRAD STATUS=CONVERGED 853 CALLS 854 TOTAL
EDM=4.53941e-07 STRATEGY= 1 ERROR MATRIX ACCURATE

EXT PARAMETER NO.	NAME	VALUE	ERROR	STEP SIZE	FIRST DERIVATIVE
1	p0	1.54837e+01	1.12170e+01	2.08636e-04	2.28852e-04
2	p1	8.59411e-01	7.88933e-02	1.65578e-06	4.26385e-02
3	p2	-1.80714e+00	2.12346e+01	2.57856e-03	7.50650e-06

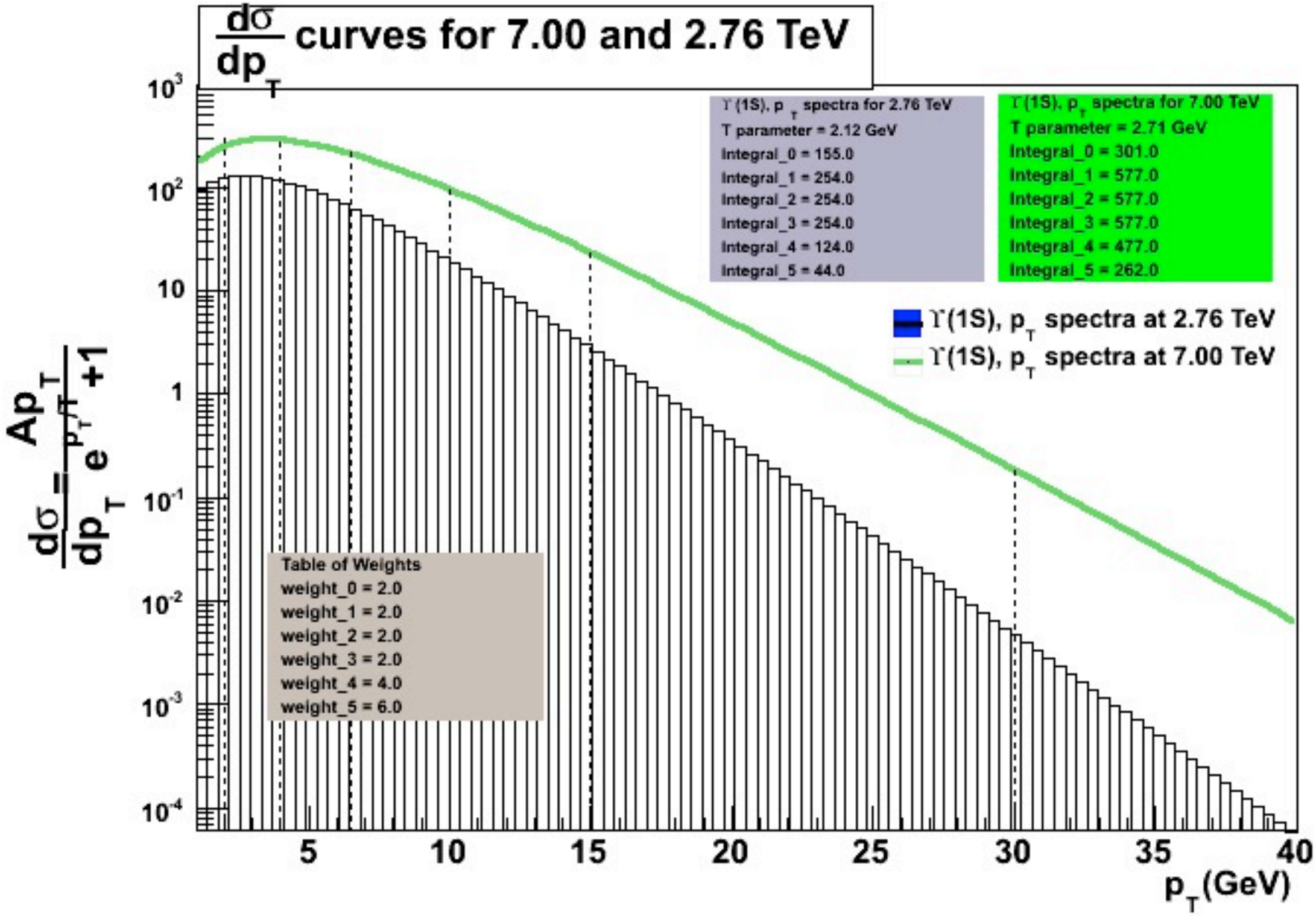
The value of A at 2.76 TeV is 222.0 pb/GeV^2
The value of A at 5.00 TeV is 320.0 pb/GeV^2
The value of A at 7.00 TeV is 396.0 pb/GeV^2

FCN=3.49425 FROM HESSE STATUS=NOT POSDEF 10 CALLS 102 TOTAL
EDM=5.27069e-10 STRATEGY= 1 ERR MATRIX NOT POS-DEF

EXT PARAMETER NO.	NAME	VALUE	APPROXIMATE ERROR	STEP SIZE	FIRST DERIVATIVE
1	p0	4.45209e-01	1.13640e-04	1.06146e-07	-4.52414e+00
2	p1	-1.23173e+00	1.00613e-03	2.93668e-07	-5.10101e-01

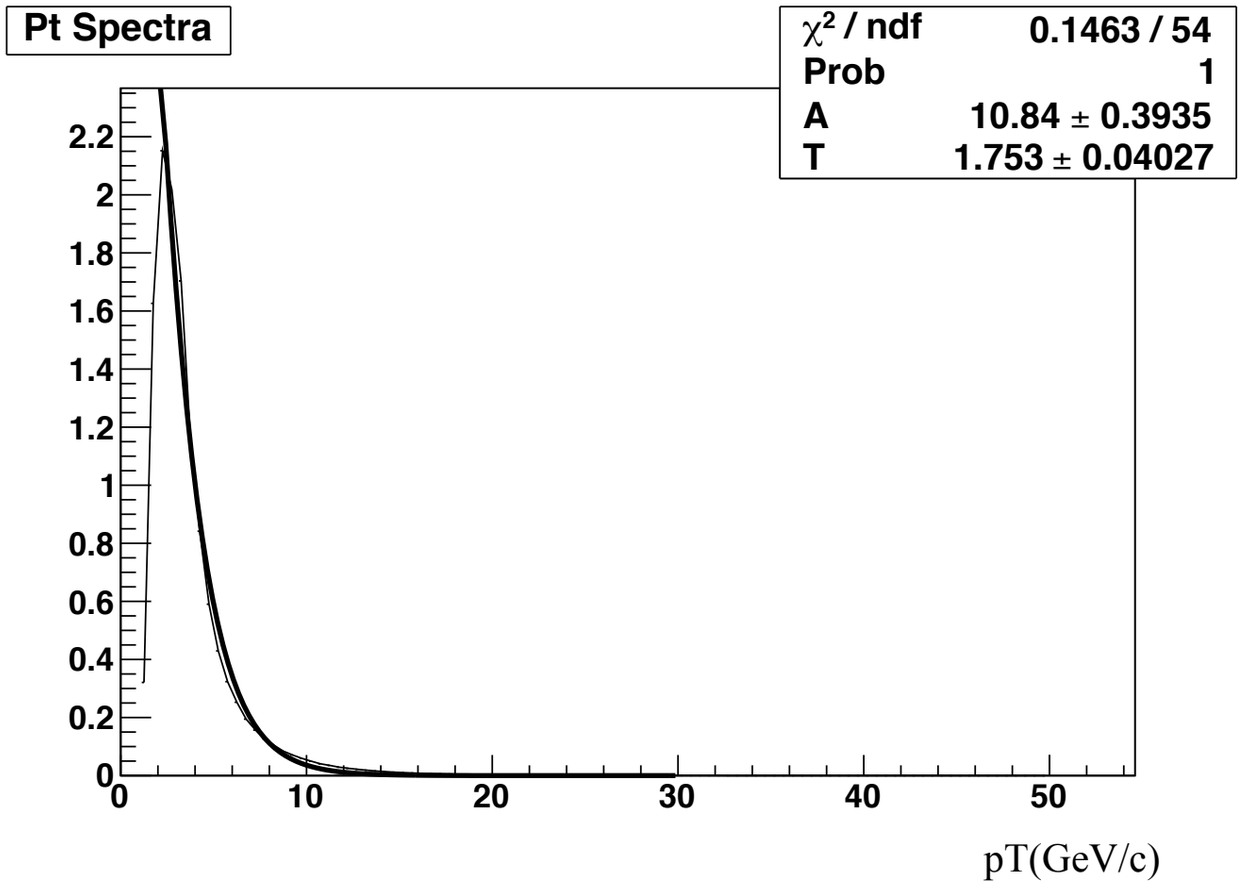
T(sqrt(s)=200 GeV) = 1.12713 GeV.
T(sqrt(s)=2.76 TeV) = 2.29565 GeV.
T(sqrt(s)=7.00 TeV) = 2.71 GeV.

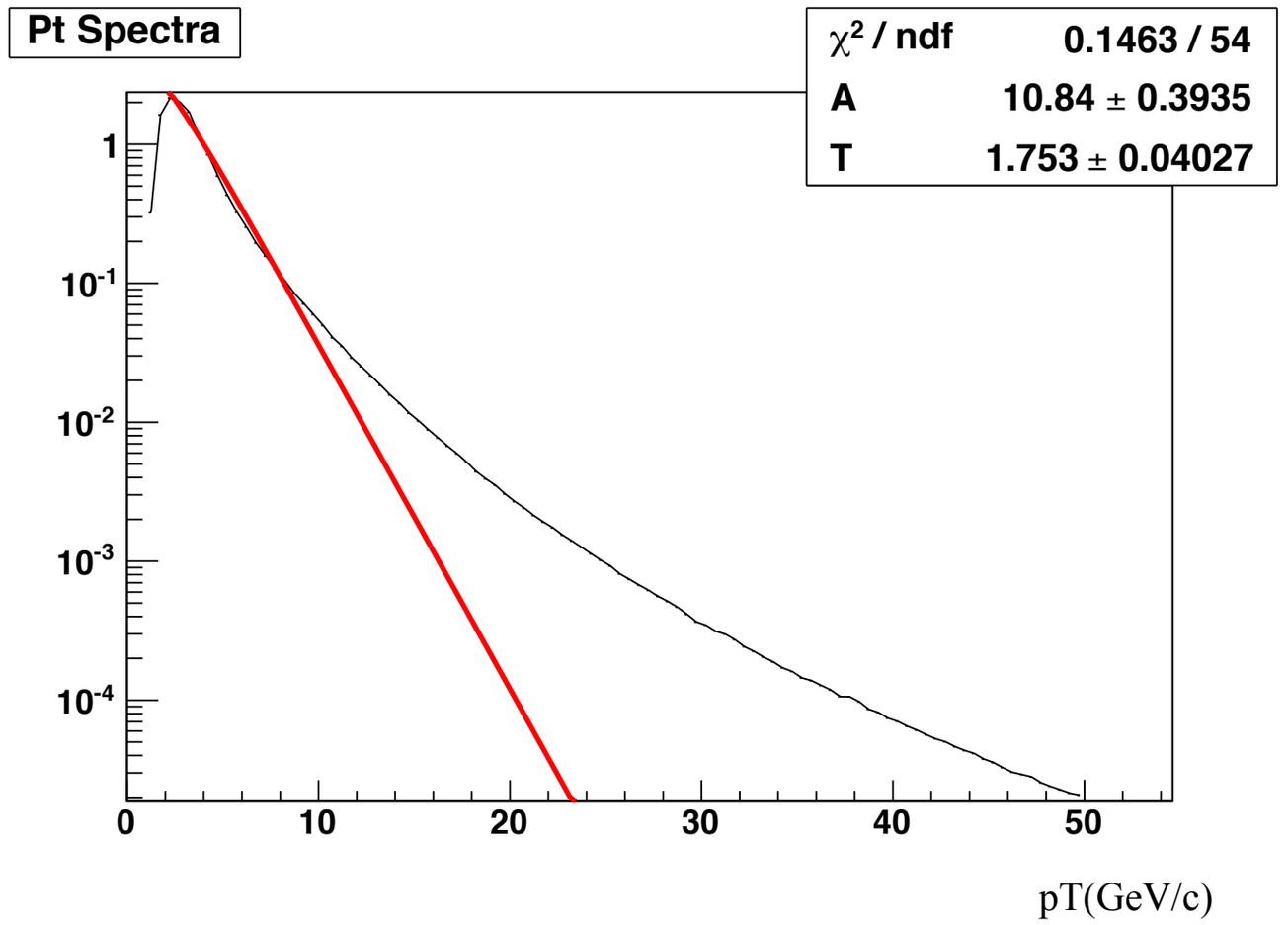
Putting our A and T in our parametrization



Weight_[x] = Integral_7TeV_[x]/Integral_276TeV_[x] where [x is the pt interval:]

Ramona's Calculation





I just managed to import her weird data files about 5 minutes ago literally. I don't even know which units she's using except pT is in GeV. She doesn't know either.

UPC Jpsi Cross section

Studying muon cuts