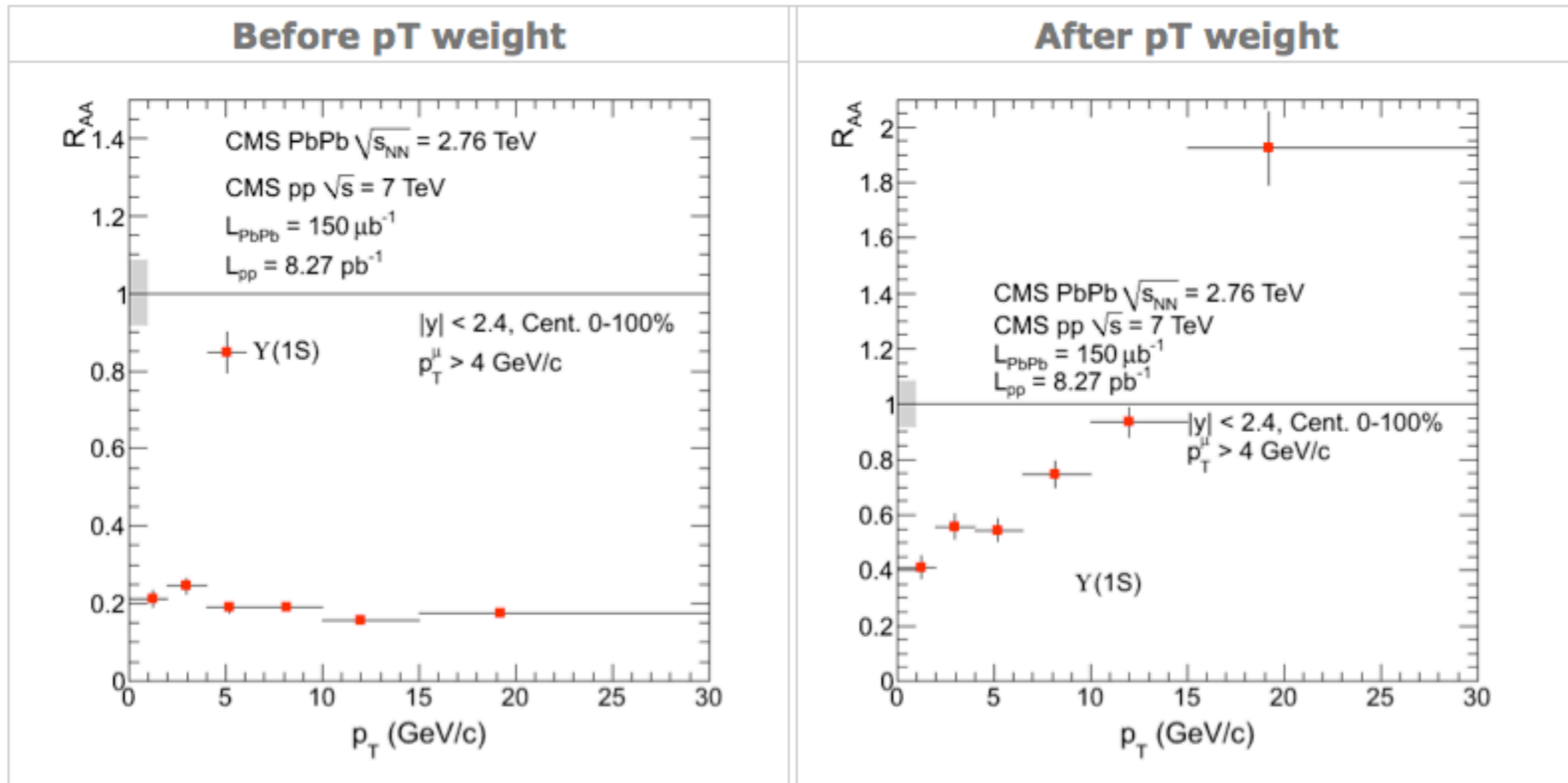
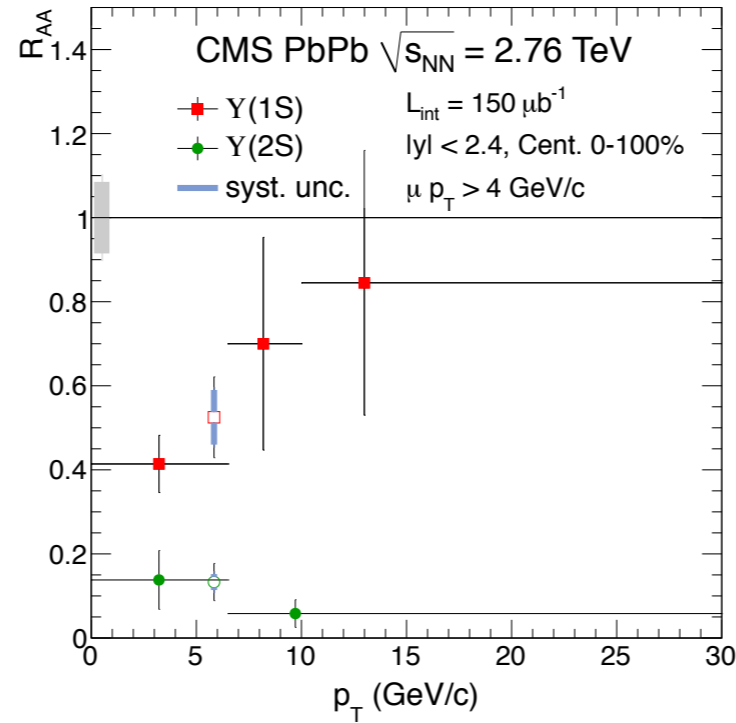


p_T Results

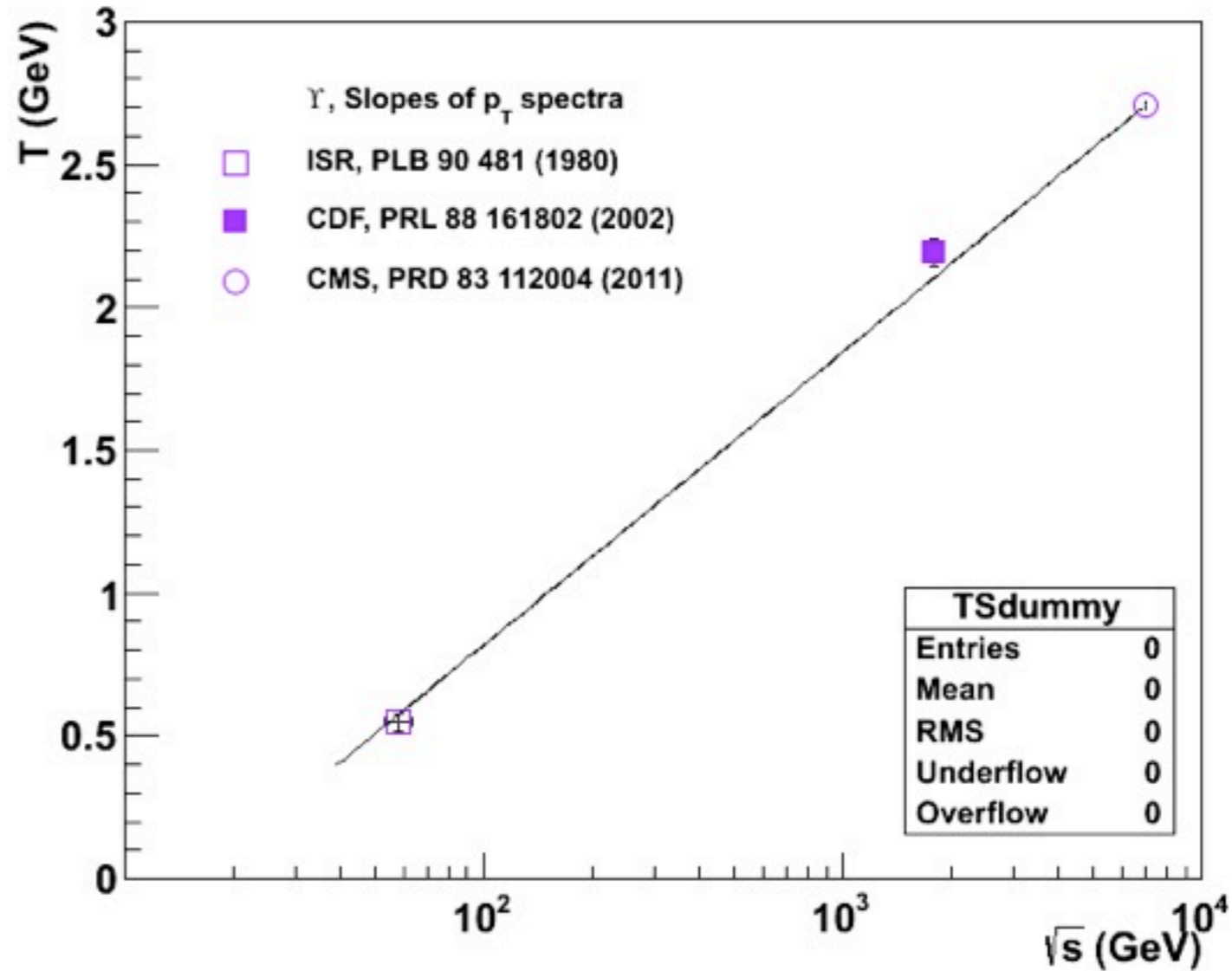
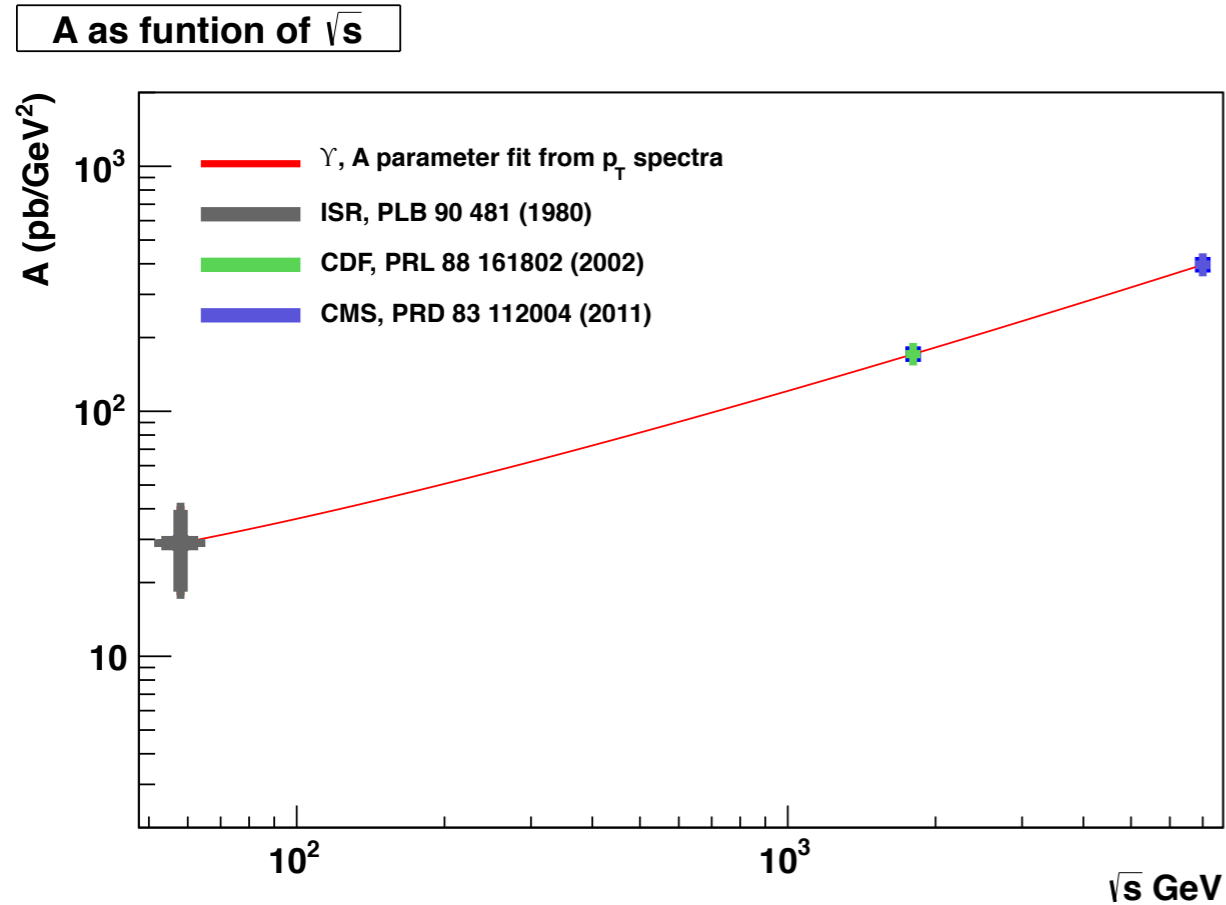
Guillermo Breto Rangel
NPG Meeting(9-19-12)

R_{AA} (using pp baseline (2.76 TeV, 7 TeV & weighted 7 TeV))



A and T parameter

$$d\sigma/dp_T = A \cdot p_T / (\exp(p_T/T) + 1)$$



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

EXT PARAMETER	STEP	FIRST		
NO. NAME	VALUE	ERROR	SIZE	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

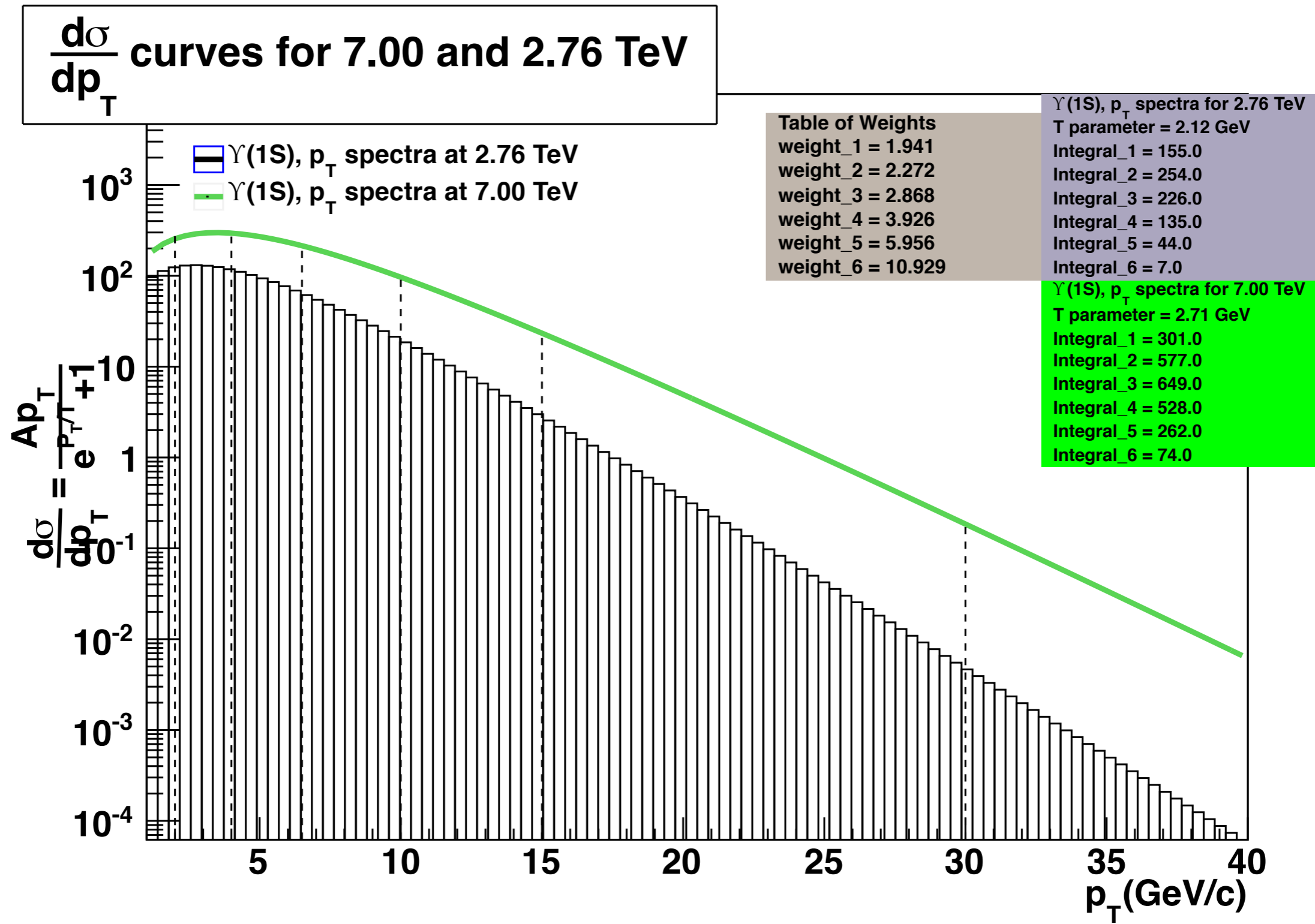
The value of A at 2.76 TeV is 222.0 pb/GeV²
The value of A at 5.00 TeV is 320.0 pb/GeV²
The value of A at 7.00 TeV is 396.0 pb/GeV²

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	APPROXIMATE	STEP	FIRST	
NO. NAME	VALUE	ERROR	SIZE	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

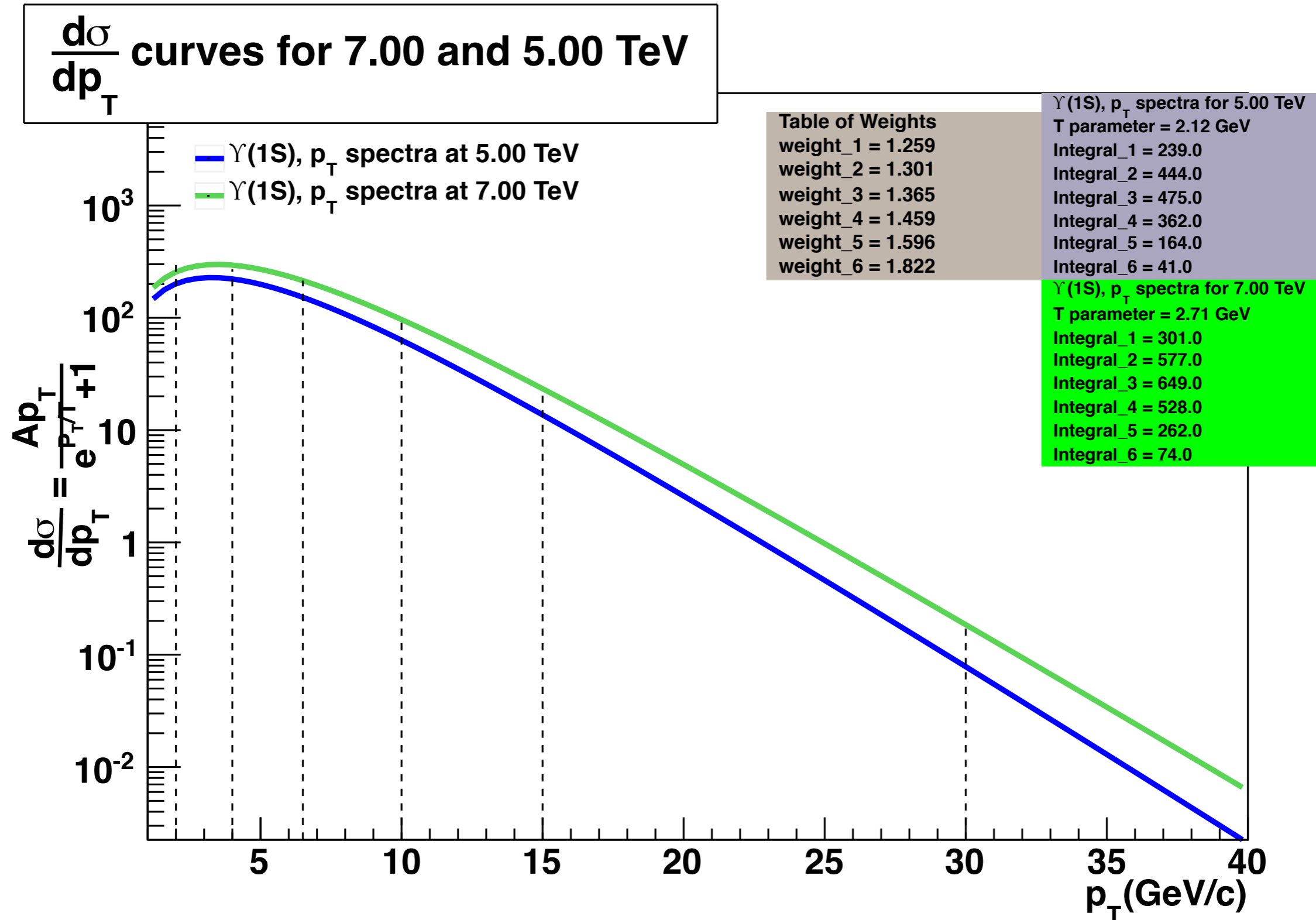
T(sqrt(s)=2.76 TeV) = 2.29565 GeV.
T(sqrt(s)=5.00 TeV) = 2.5602 GeV.
T(sqrt(s)=7.00 TeV) = 2.71 GeV.

Putting our A and T in our parametrization



Weight_[x] = Integral_7TeV_[x]/Integral_276TeV_[x] where [x is the pt interval: (0-2, 2-4, 4-6.5, 6.5-10, 10-15, 15-30)]

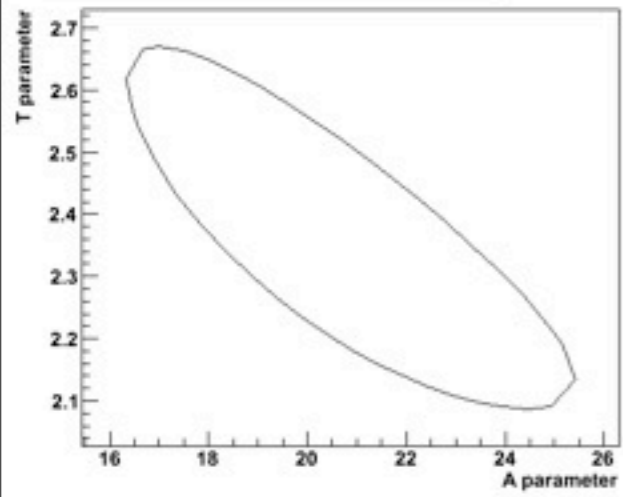
Putting our A and T in our parametrization for 5.00 TeV



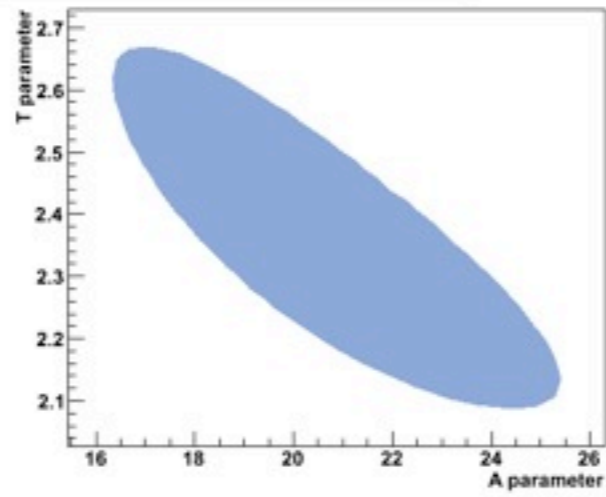
Weight_[x] = Integral_7TeV_[x]/Integral_5TeV_[x] where [x is the pt interval: (0-2, 2-4, 4-6.5, 6.5-10, 10-15, 15-30)]

Contours

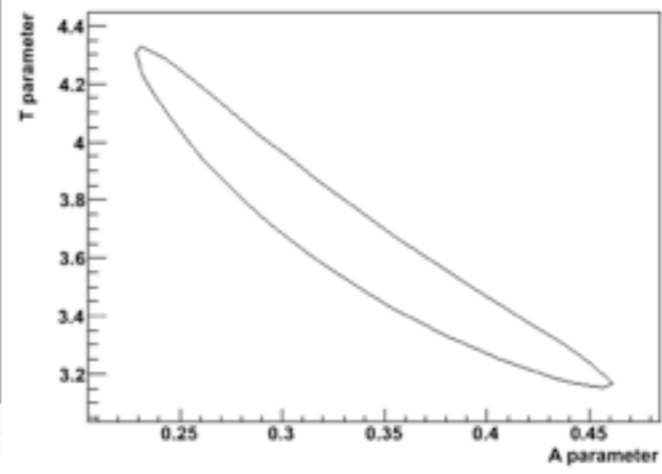
First Contour for parameter T and A for CDF data



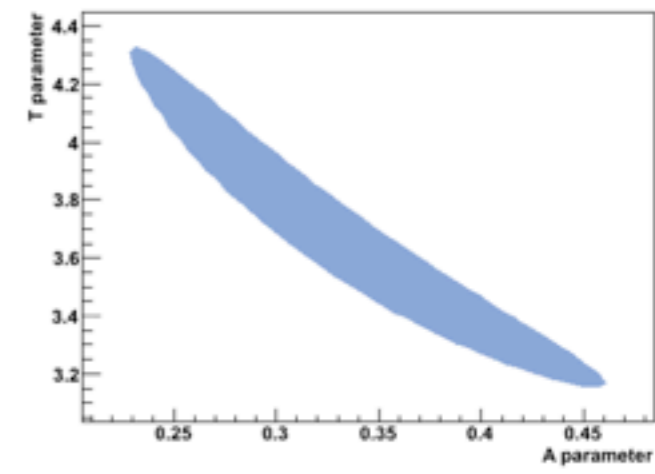
Contour for parameter T and A for ERRDEF=1



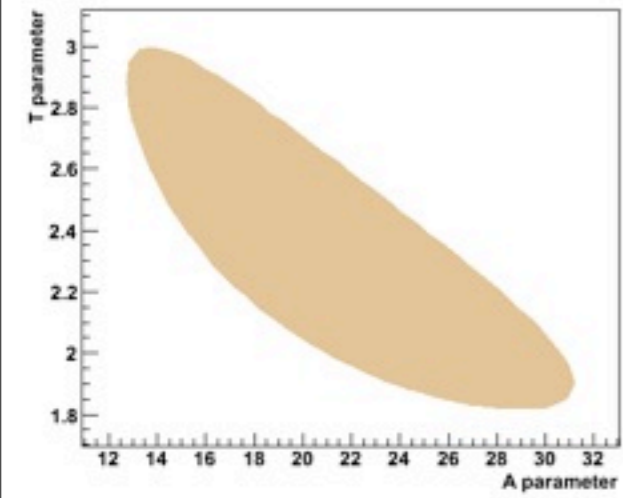
First Contour for parameter T and A for CMS data



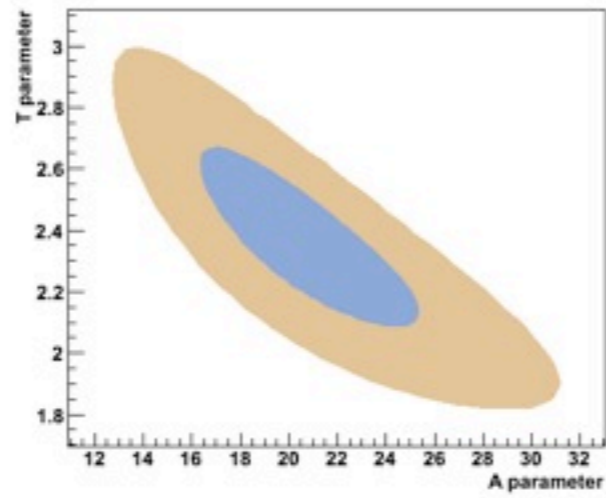
Contour for parameter T and A for ERRDEF=1



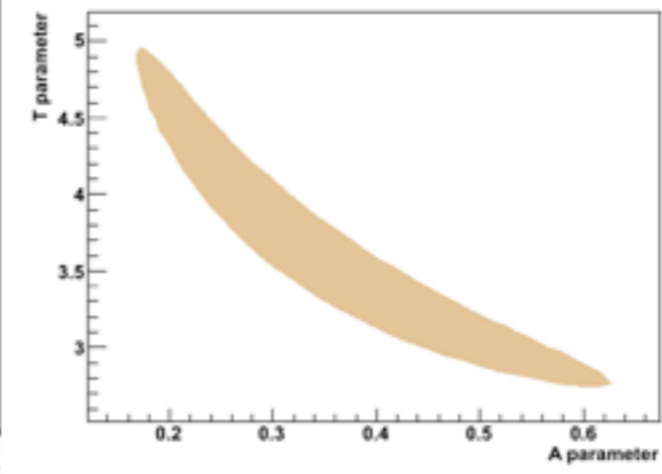
Contour for parameter T and A for ERRDEF=2



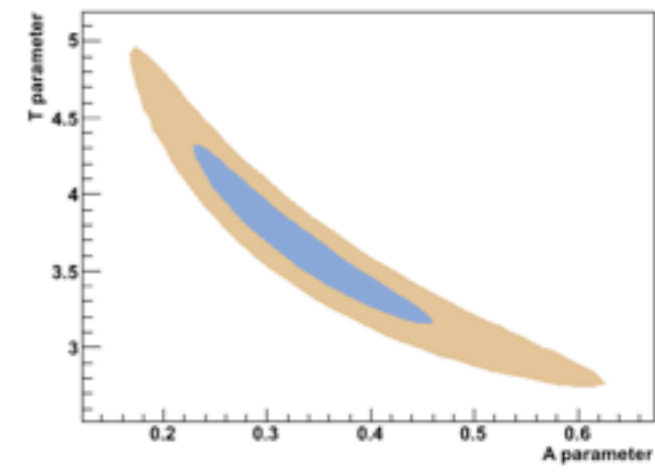
Contour for parameter T and A for ERRDEF=2



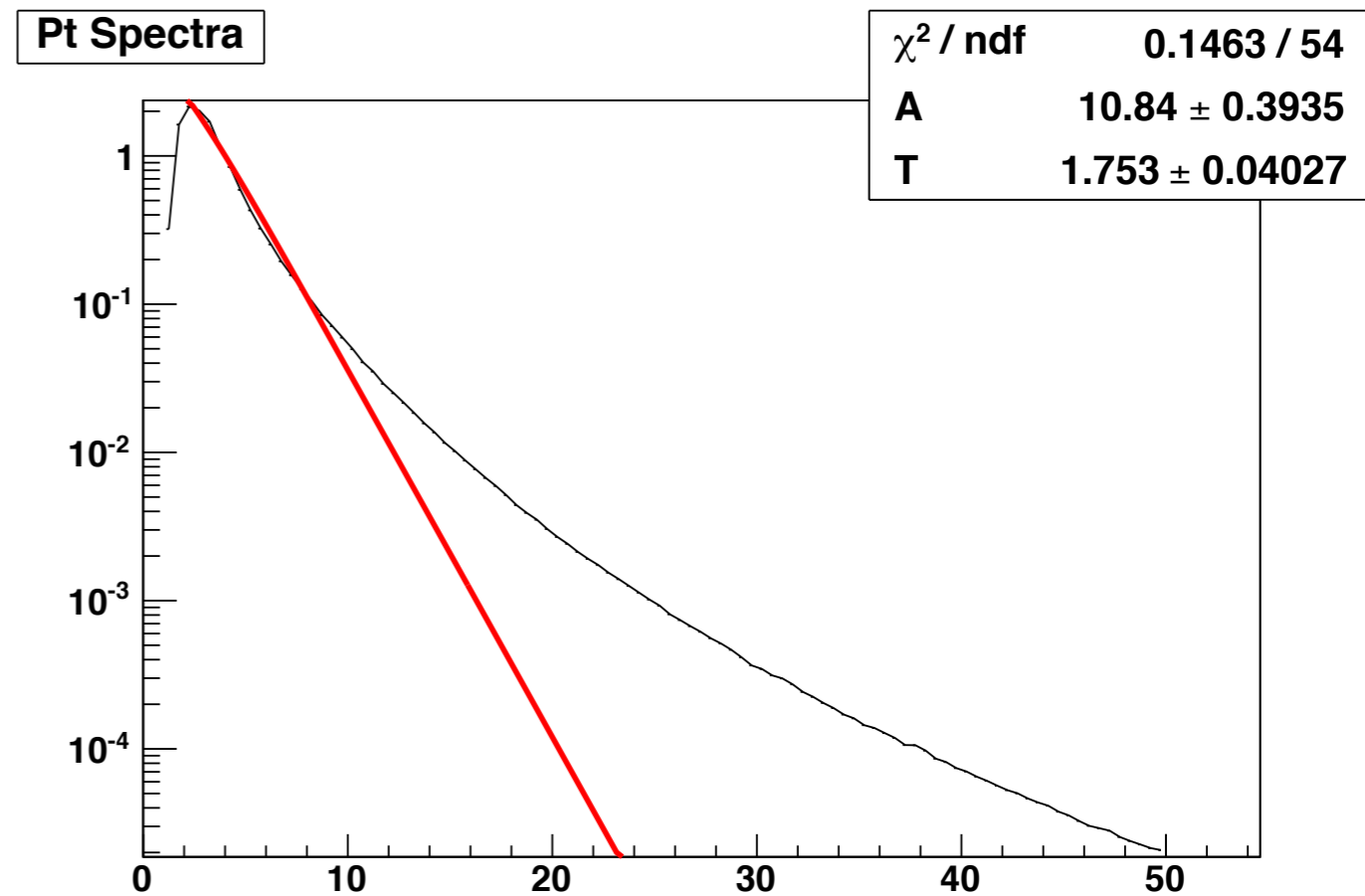
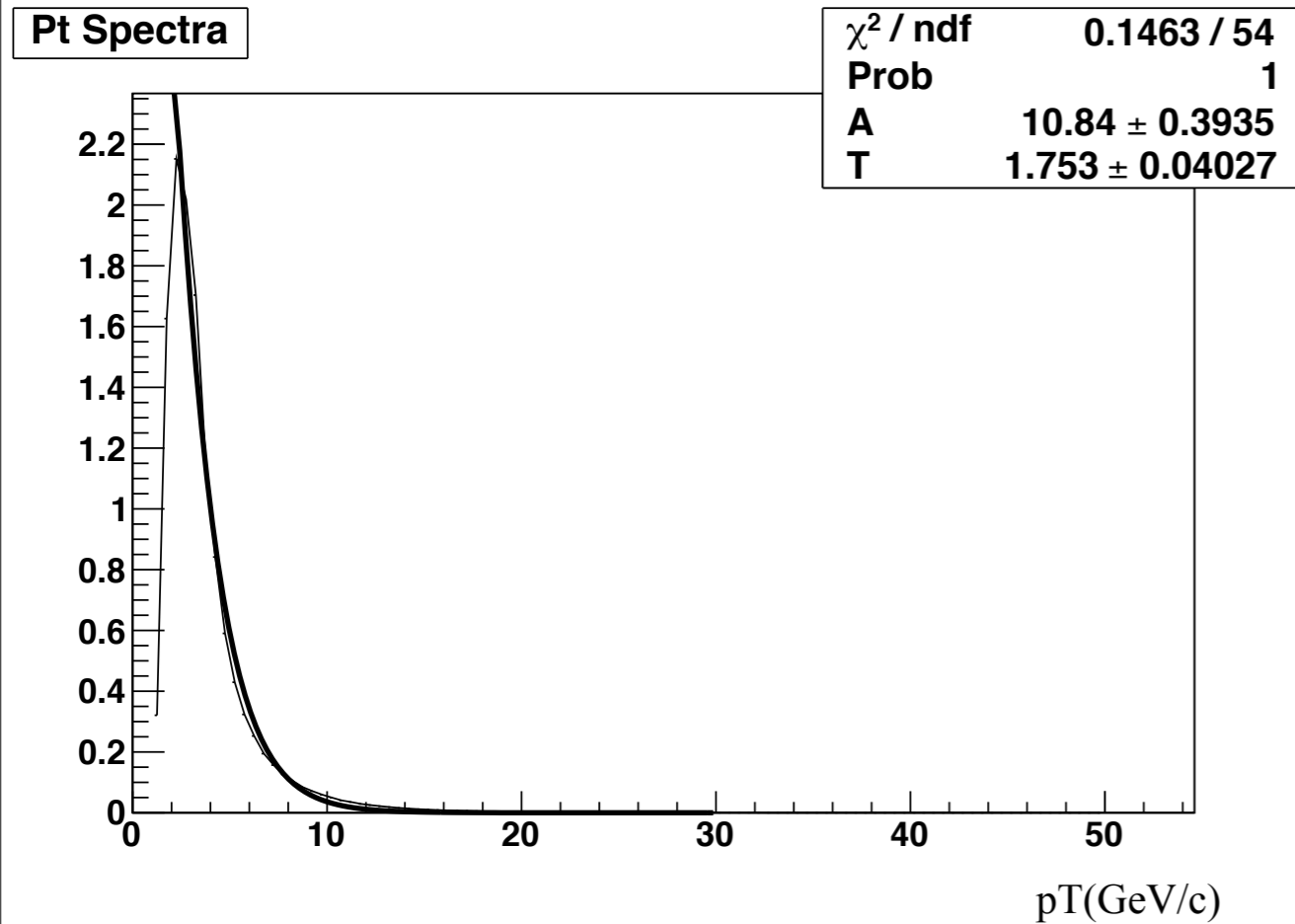
Contour for parameter T and A for ERRDEF=2



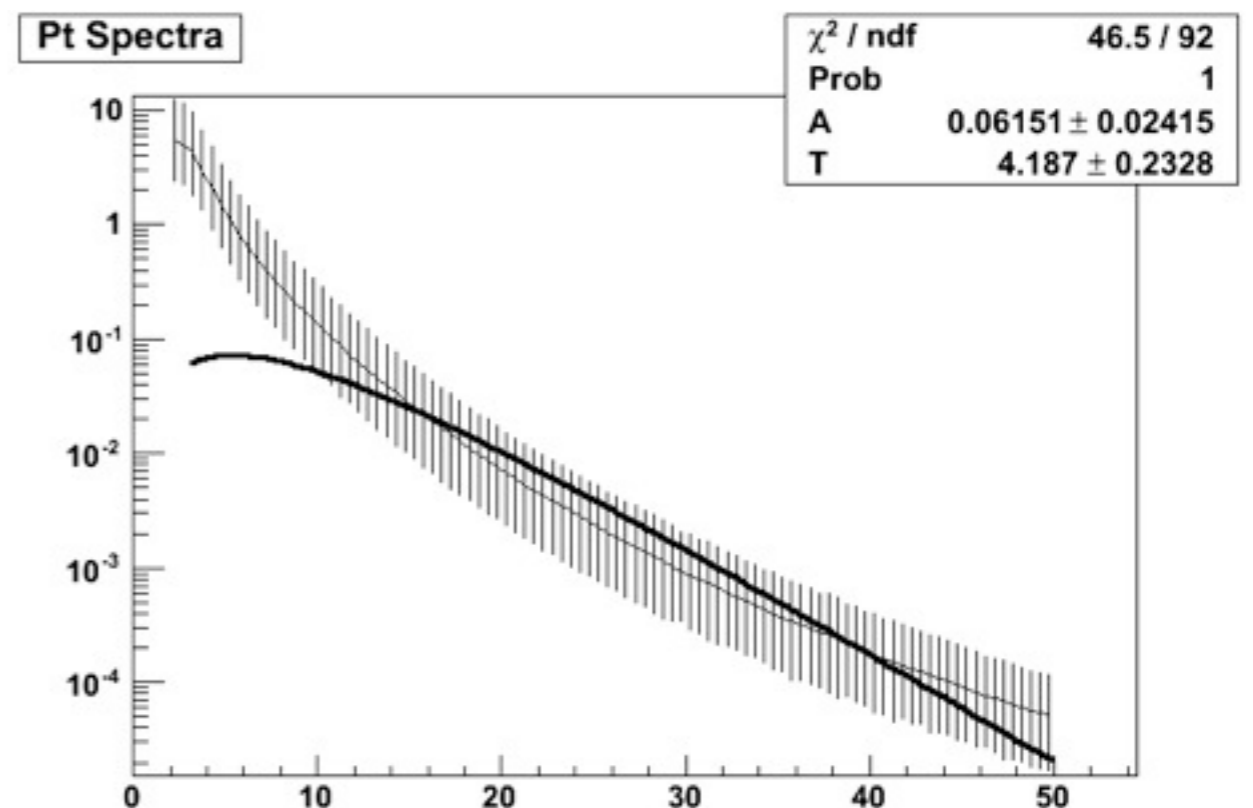
Contour for parameter T and A for ERRDEF=2



Ramona's Calculation for 7 TeV



Need to figure out units and errors.



Ramona's Calculation for 2.76 TeV

