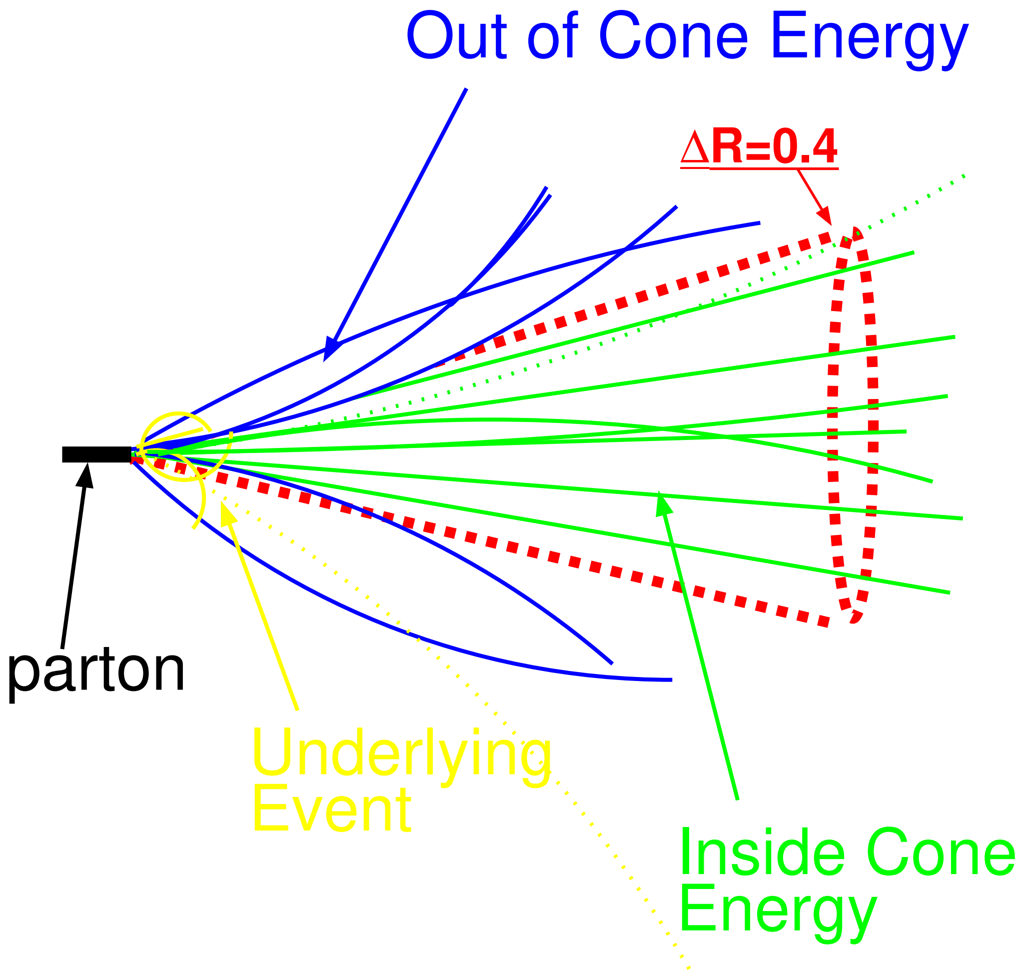
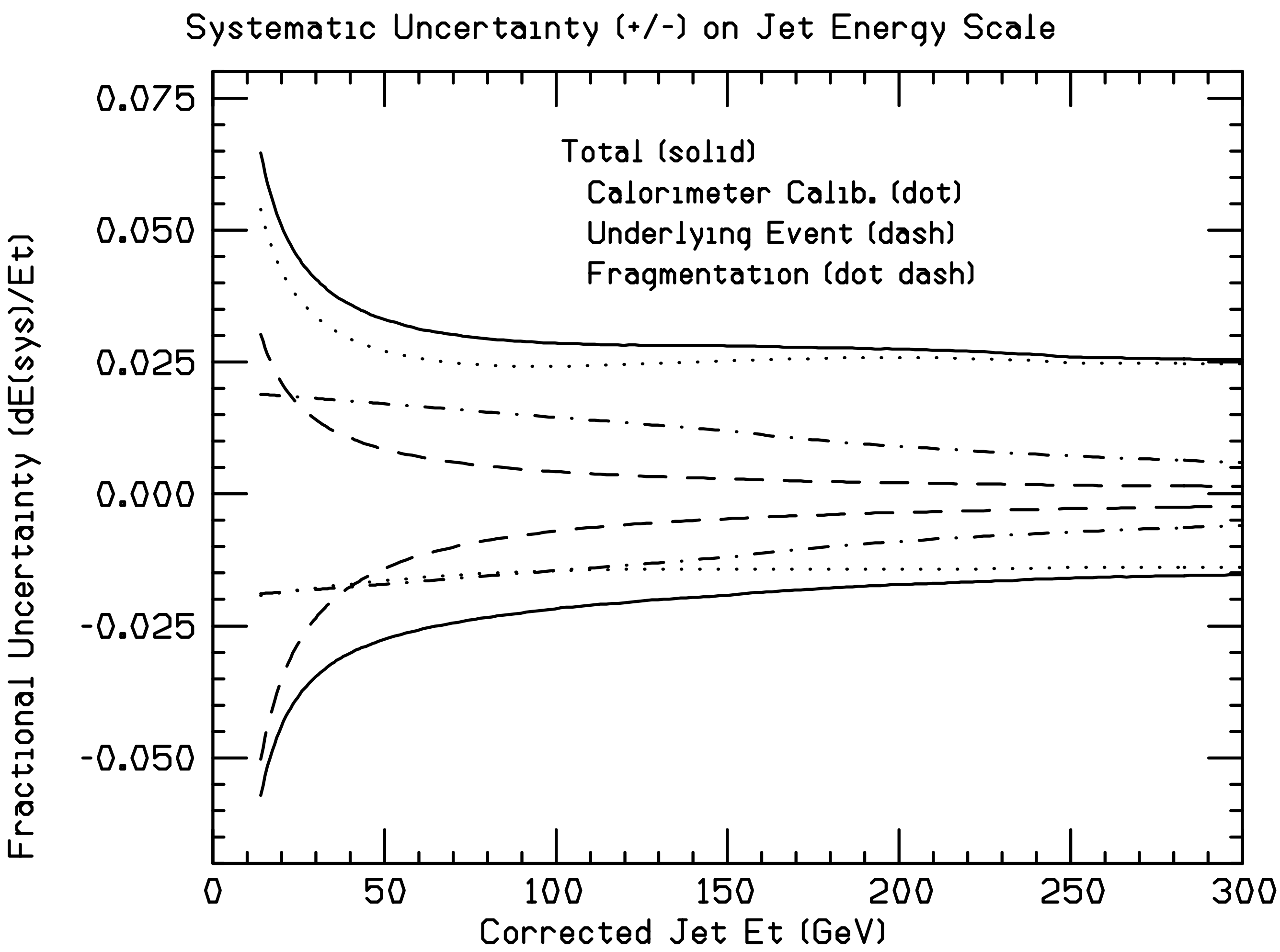
Anatomy of a Jet at CDF

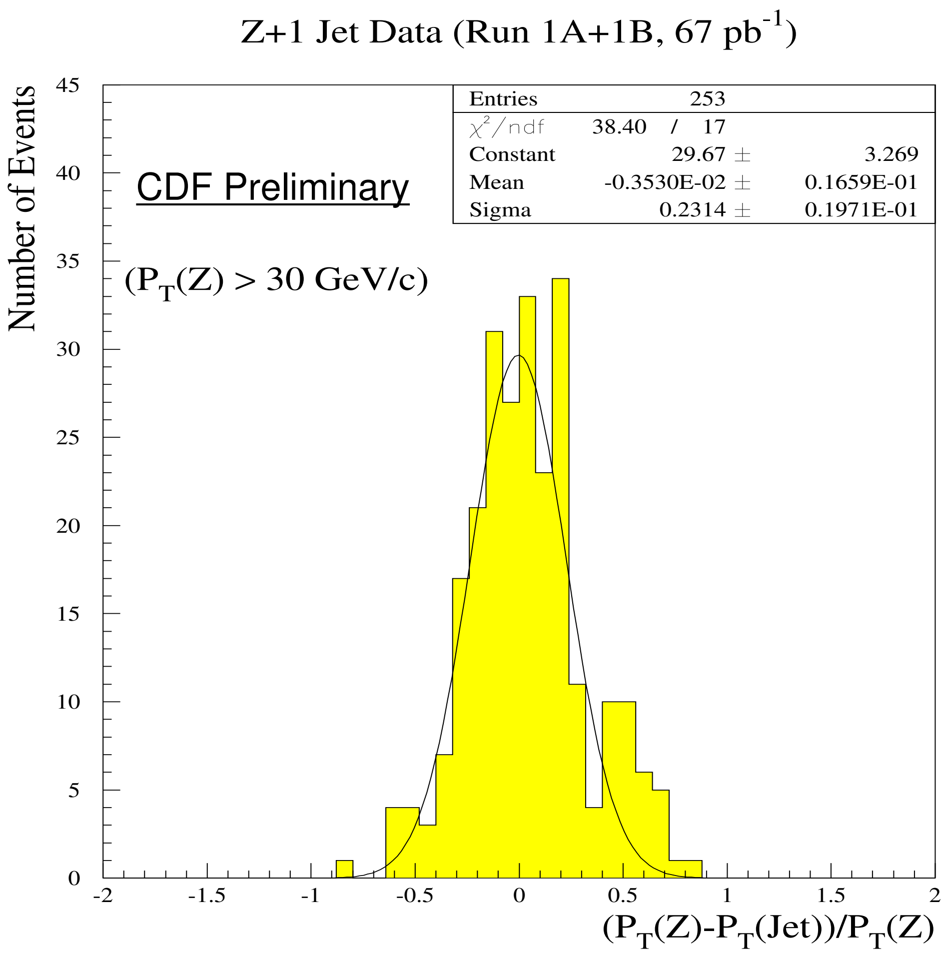


In Cone Jet Scale Uncertainty

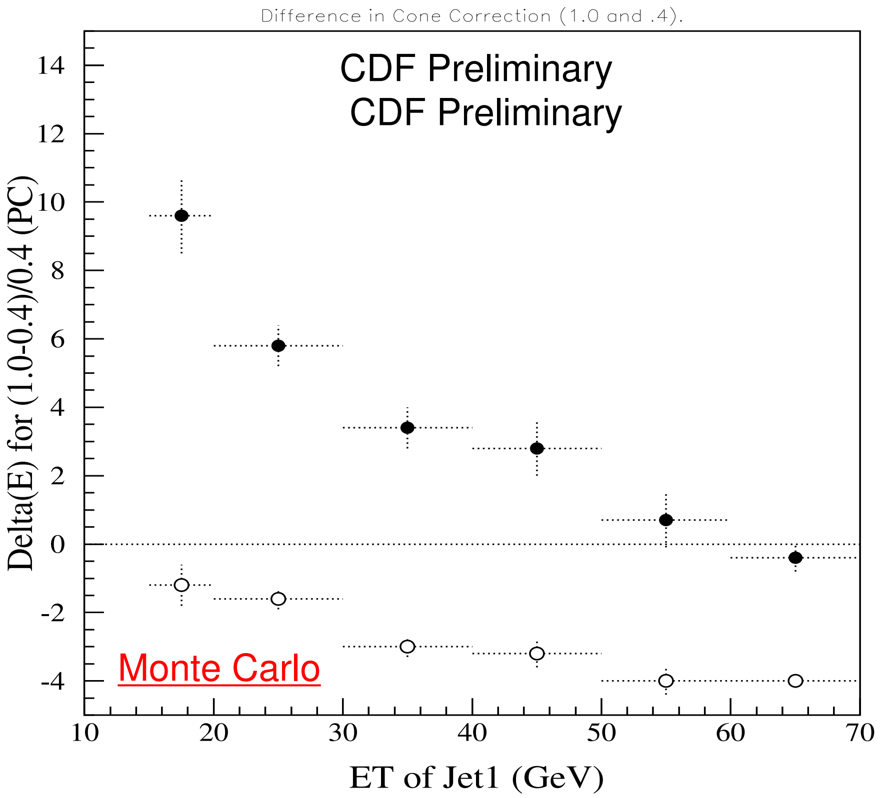


Tests of Jet E_T Scale

- Balancing Jets Against Z and $\gamma + 1$ Jet Events
  — Balance is good to $\sim 3\%$
- Comparisons of E_T in Annuli between Data and Monte Carlo in W and Z+1 Jet Events ~10 % for $E_T < 20$ GeV and $< 7\%$ for $E_T > 30$ GeV

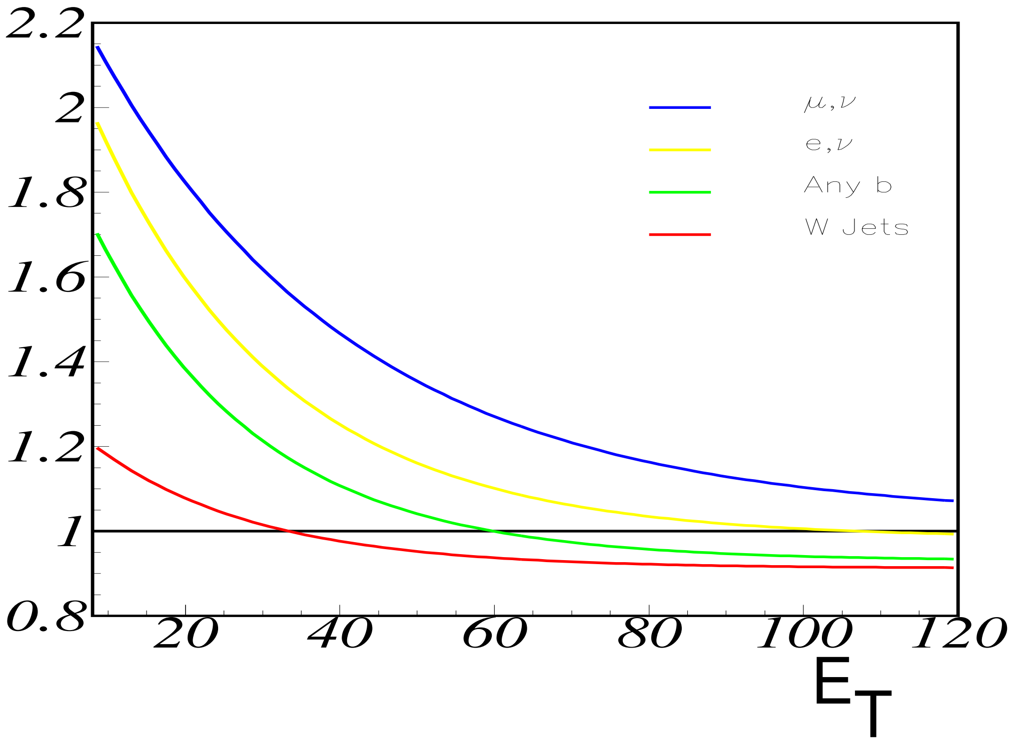

Z+1 Jet Data (Run 1A+1B, 67 pb^{-1})
Entries 253
χ^2/ndf 38.40 / 17
Constant 29.67 ± 3.269
Mean -0.3530E-02 ± 0.1659E-01
Sigma 0.2314 ± 0.1971E-01
CDF Preliminary
(P_T(Z) > 30 GeV/c)
Number of Events
(P_T(Z)-P_T(Jet))/P_T(Z)

W+1 Jet Annular E_T Study



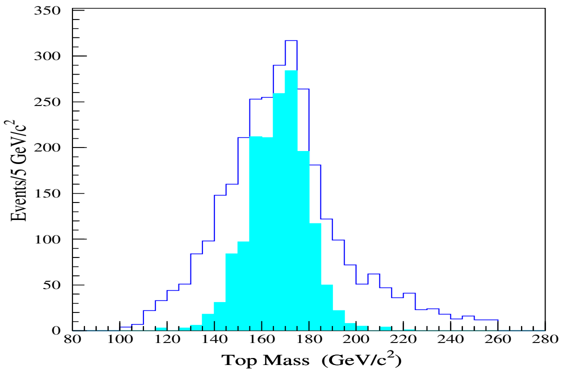
Jet Corrections Specific to Top

- Correct for ν and μ expected from associated b- and c-decays.
- Correct for effects of quark E_T spectra.



Mass Reconstruction for Top and W+jets Monte Carlo

Reconstructed mass for HERWIG MonteCarlo, M_{top} = 170 GeV



Reconstructed mass for the VECBOS+HERPRT W+3 jets events.