$\mathcal{H}$ Analysis: Systematic Uncertainties ($\star$ CDF Preliminary $\star$)

- Event Selection: Same as for Mass Analysis
- Default VECBOS Q^2 scale: $\langle P_T \rangle^2$

Source	Effect on M_{top} (GeV/c^2)	Effect on $N_{t\bar{t}}$
1. Jet energy scale uncertainty		
Detector effects	$^{+7}_{-5}$	± 1.4
Gluon radiation ($\pm 10\%$)	$^{+16}_{-12}$	± 3.6
2. Q^2 scale in VECBOS ($\langle P_T \rangle^2 \rightarrow M_W^2$)	$+4$	-10.5
3. Underlying event in VECBOS	$^{+3}_{-1}$	$^{+1.6}_{-3.1}$
4. Initial state radiation in HERWIG	± 5	± 1.0
Total	$^{+19}_{-14}$	$^{+5}_{-12}$

CDF Top Mass from Tagged Events: 176 ± 8 (*stat*) ± 10 (*sys*) GeV/c^2
H Analysis Top Mass: 181 ± 11 (*stat*) $^{+19}_{-14}$ (*sys*) GeV/c^2

$N_{t\bar{t}} = 56 \pm 10$ (*stat*) ± 5 (*sys*), for $Q^2 = \langle P_T \rangle^2$ in VECBOS
$N_{t\bar{t}} = 45 \pm 13$ (*stat*) ± 5 (*sys*), for $Q^2 = M_W^2$ in VECBOS