# Status report

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## 1 Plan

- SHERPA: up to 2 jets (now available up to 1 jet )
- Madgraph: up to 2 jets (now available up to 3 jets for CMSSW\_3\_1\_6)
- FastSimulation with CMSSW\_3\_7\_0
- Selection of semimuonic ttbar events.

## **1.1** $20pb^{-1}$ , normalized to 93pb xsection

Programs	SHERPA	MadGraph
GlobalMuons	910.98 +- 4.12	914.02 +- 4.13
eta < 2.1, pT > 20	453.01 +- 2.90	421.52 +- 2.80
muon - ID	341.71 +- 2.52	322.67 +- 2.45
relIso < 0.05	274.51 +- 2.26	244.22 +- 2.13
Njet >= 1	249.10 +- 2.15	221.39 +- 2.03
Njet >= 2	169.96 +- 1.78	148.22 +- 1.66
Njet >= 3	75.84 +- 1.19	63.83 +- 1.09
Njet >= 4	22.40 +- 0.65	16.61 +- 0.56
n(mu) == 1	22.08 +- 0.64	16.42 +- 0.55
el.veto	18.92 +- 0.59	14.36 +- 0.52

## **1.2 Control plots-I**



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χ²/ndof

#### Fig: $p_T(mu)$ after sel. ( SHERPA)

pt of {µ} all steps [GeV] (sherpa-tt)







## **1.3 Control plots-II**

### Fig: $p_T(mu)$ ratio before sel. (SHERPA/Madgraph)



#### Fig:N(selected jets) ratio (SHERPA/Madgraph)





#### Fig: $p_T(mu)$ ratio after sel. (SHERPA/Mac



