ATLAS Selection for Xsec (II)

Get purer samples by adding

M_W constraint: at least one of three di-jet sys in top candidate has $|M_{jj}-M_W|$ <10 GeV

jet scale

and/or

$S/B\sim 3.4$

Centrality : require $|\eta_{jet}|<1$ for **3** highest Pt jets

$S/B\sim 5$
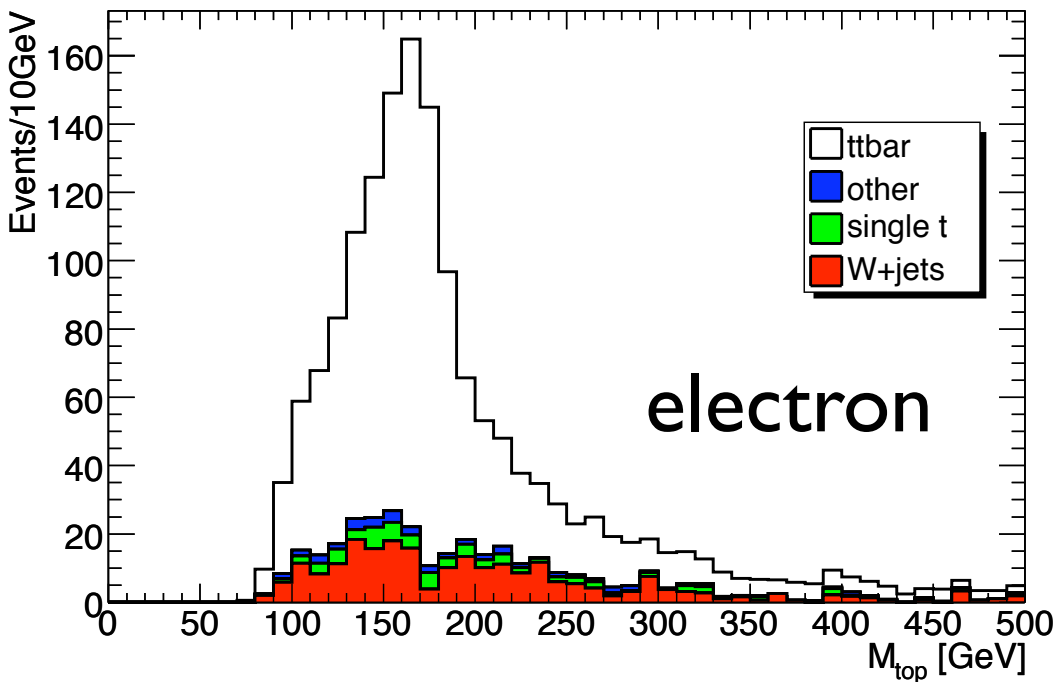
jet angular res

Possible additions:
Cut on total mass of event
cut on cos

Single Lepton Reconstruction

electron

Top quark candidate: 3-jet combination with highest P_T

Expect peak in top mass

Get purer samples by adding

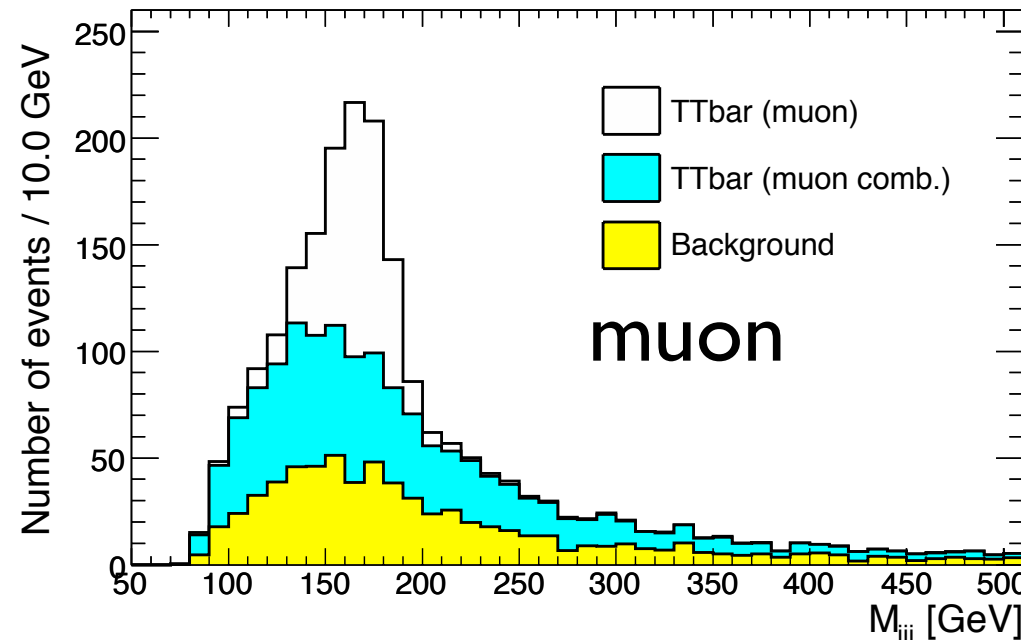M_W constraint: at least one of three di-jet sys in top candidate has $|M_{jj}-M_W|<10$ GeV

and/or

Centrality : require $|\eta_{jet}|<1$ for 3 highest P_T jets

S/B~3.4

jet scale

S/B~5

jet angular res

muon

Top masses shown with M_W constrain

Tails result from comb bkg