

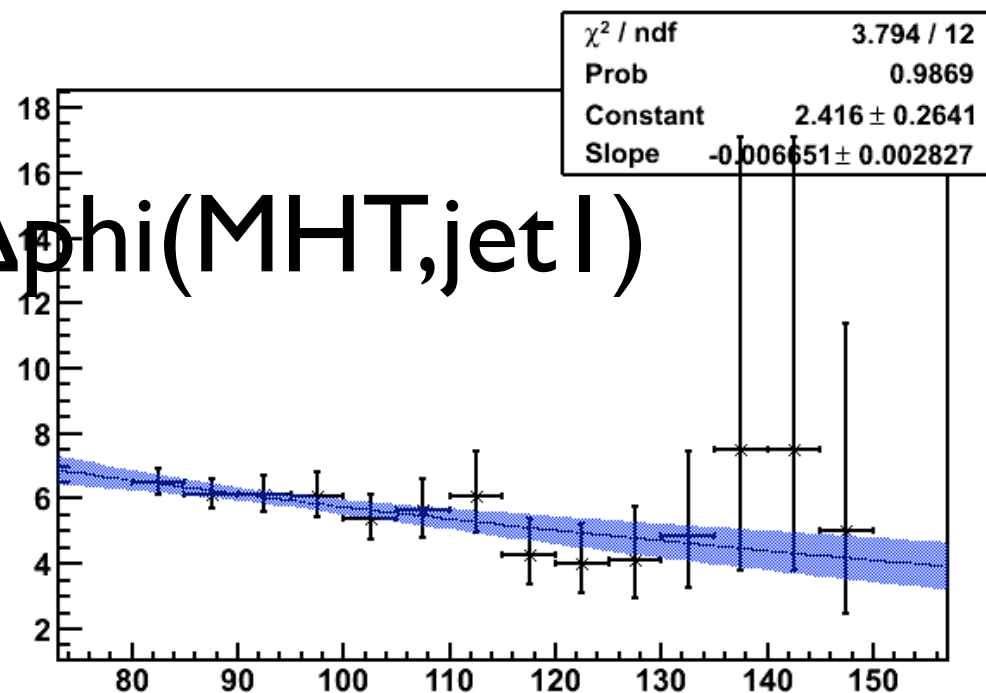
Update on "ABCD" Method

05-05-2010

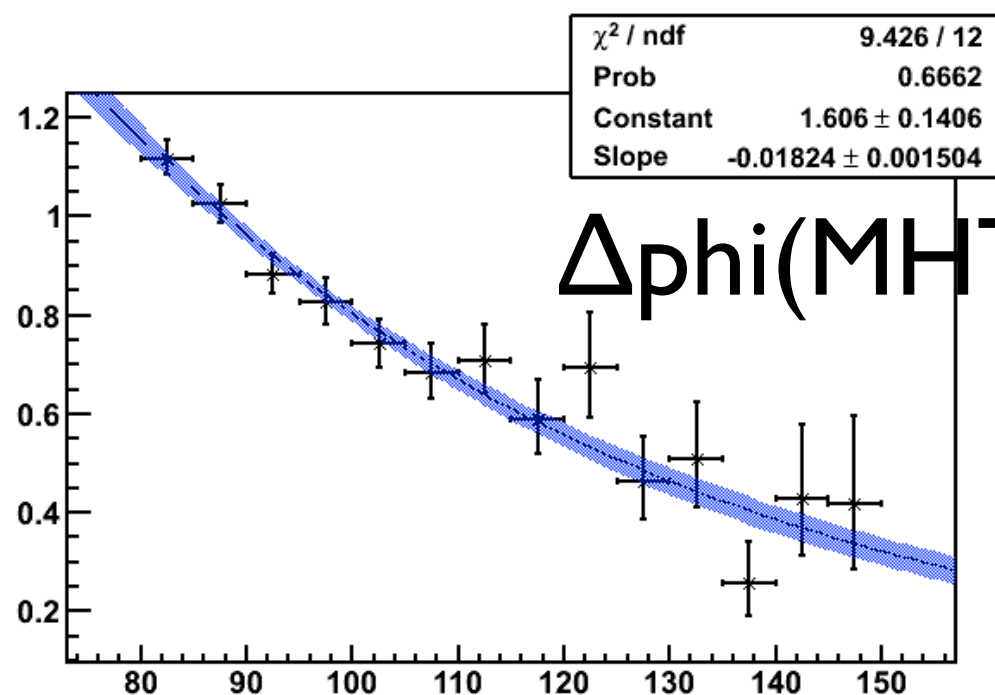
Fit all three $\Delta\phi$ variables

$\Delta\phi(\text{MHT}, \text{jet1})$

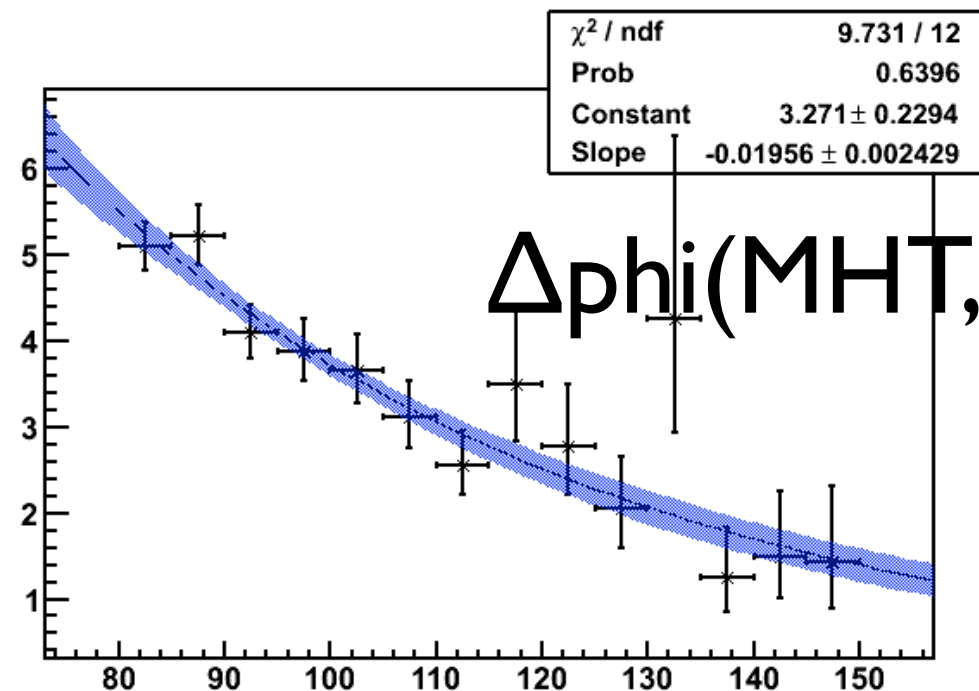
Control region:
 $80 \text{ GeV} < \text{MHT} < 150 \text{ GeV}$



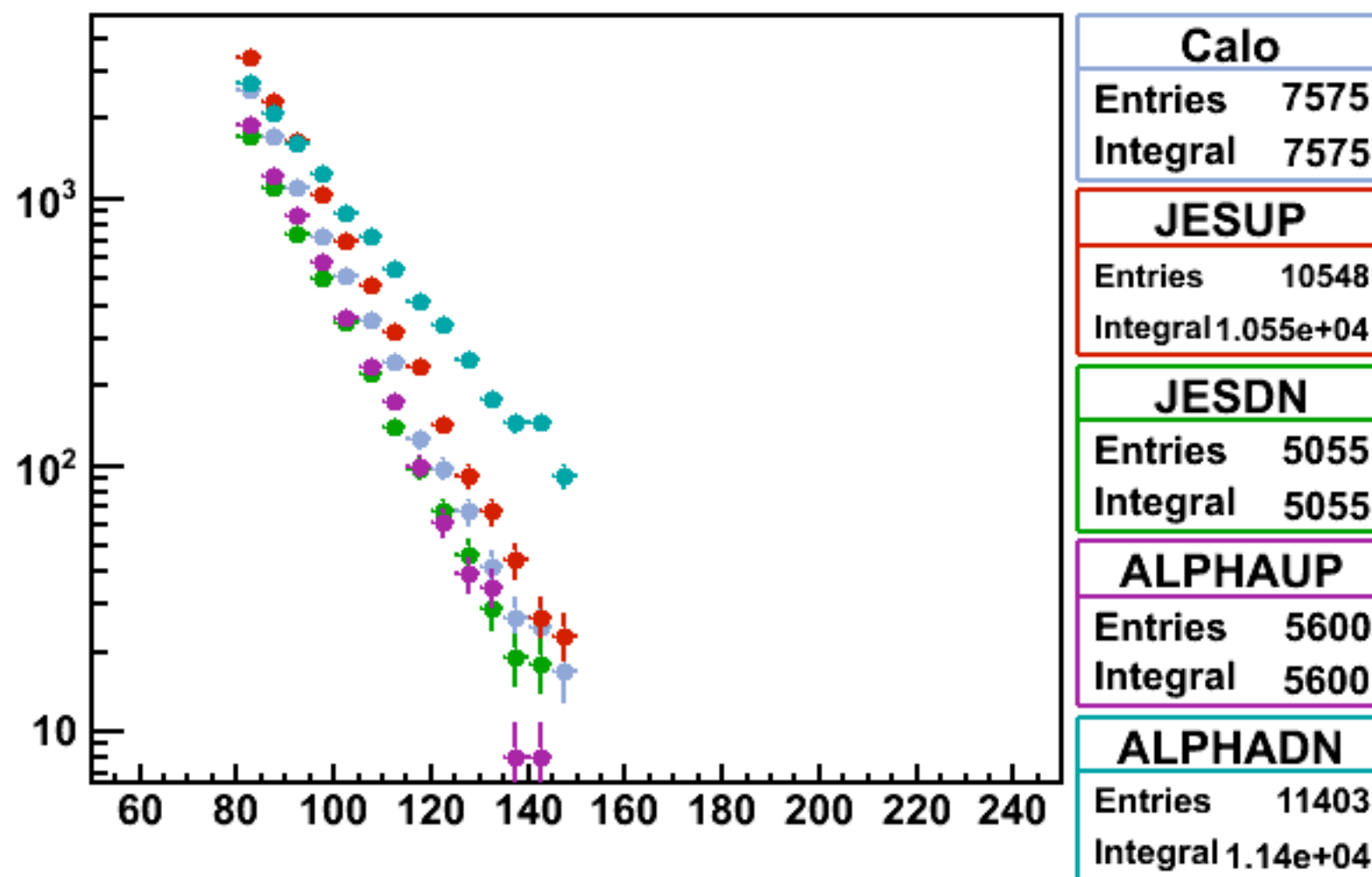
$\Delta\phi(\text{MHT}, \text{jet2})$



$\Delta\phi(\text{MHT}, \text{jet3})$

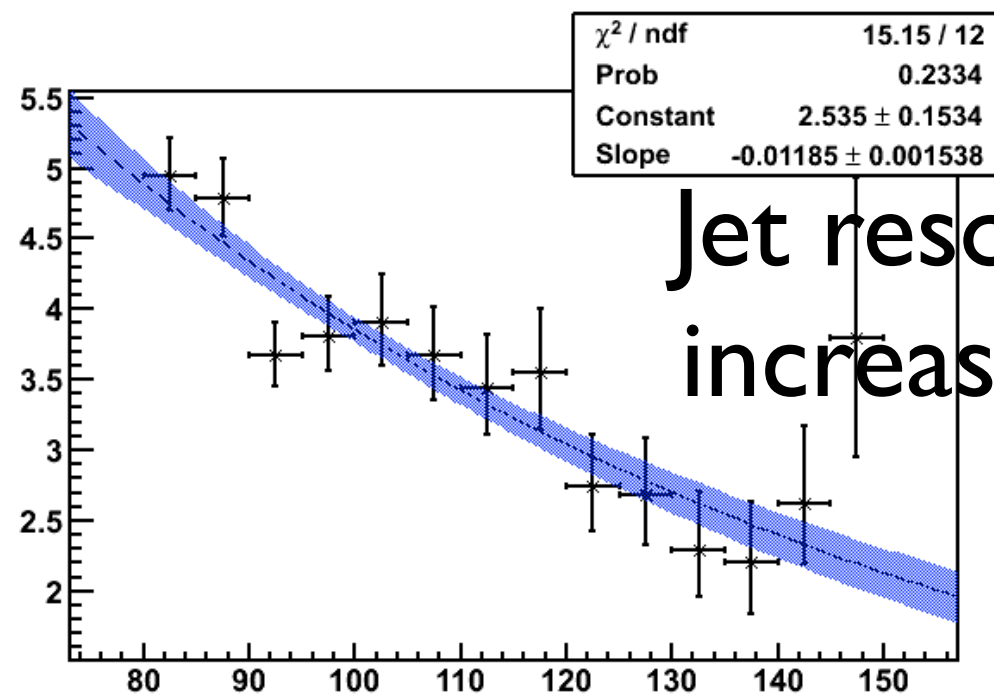
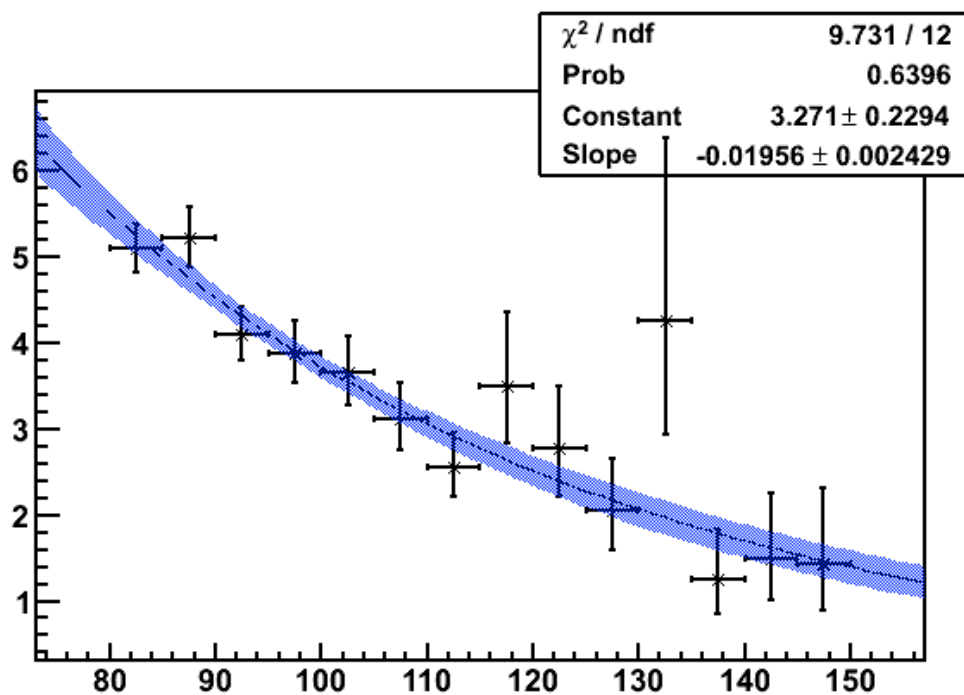


MHT

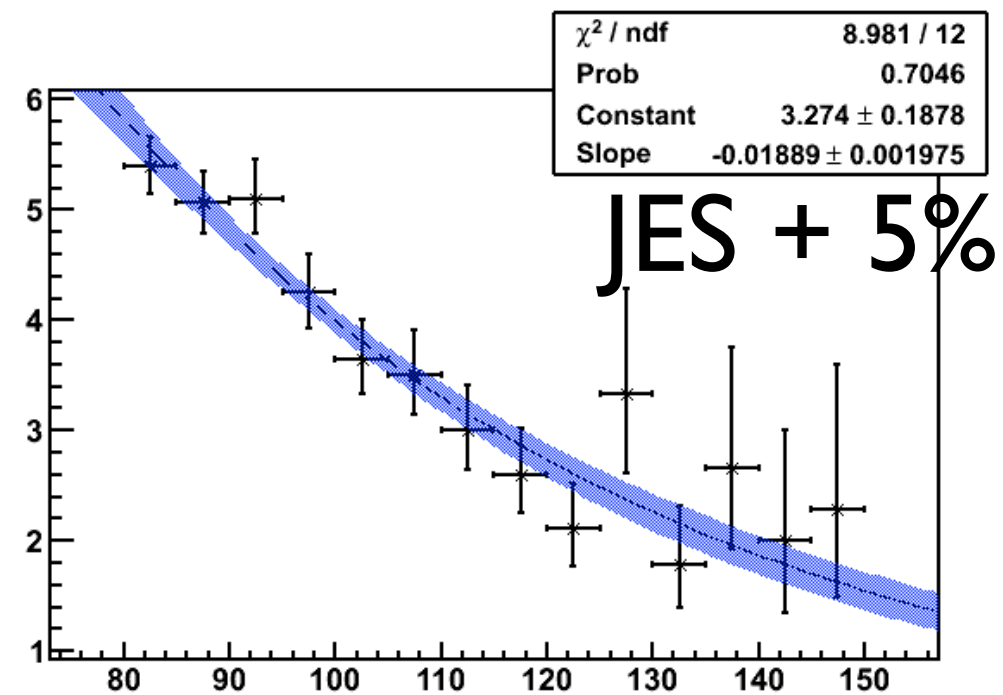
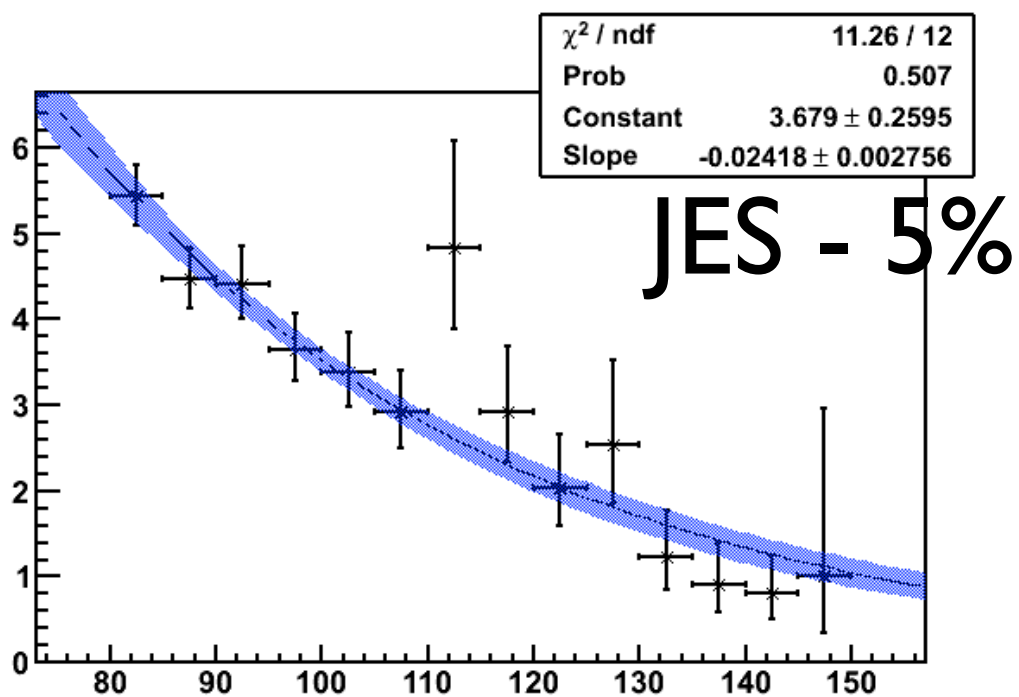


Variation of
JES $\pm 5\%$
jet resolution tail
 $\pm 50\%$

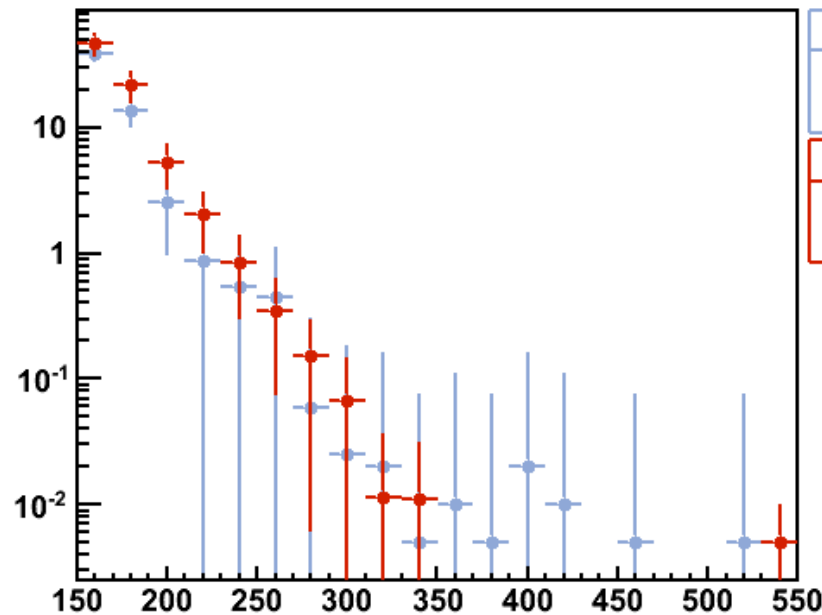
Fit diff samples for $\Delta\phi(\text{MHT}, \text{jet3})$



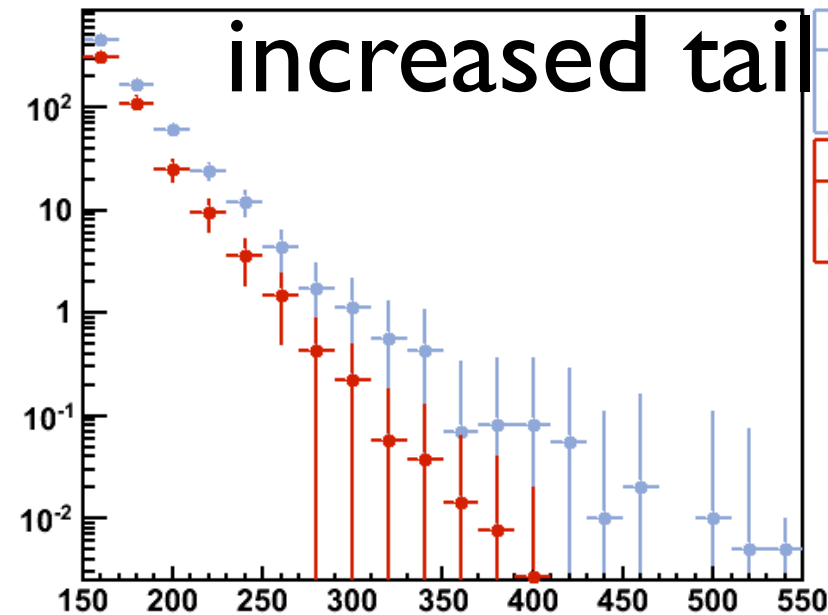
Jet resolution
increased tail



HT.MHT

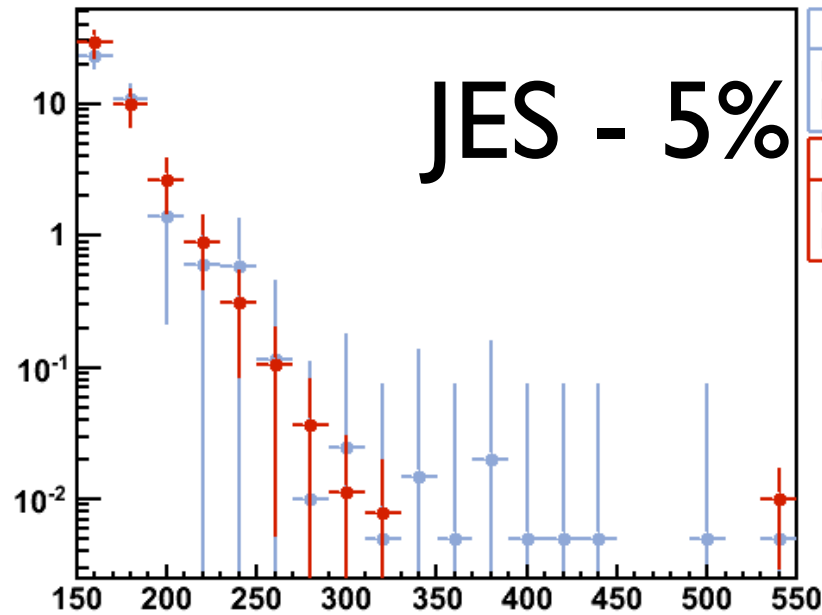


MHT.MHT

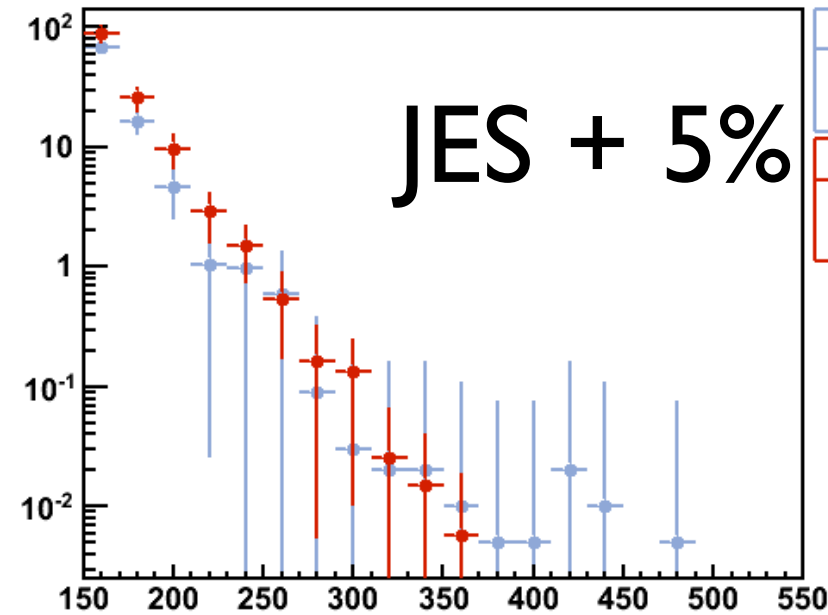


Jet resolution
increased tail

HT.MHT



MHT.MHT



1. Create a complete set of root files with "abcd functions" for the RA2 framework
2. Optimise result plots with systematic uncertainties
3. New smearing of Jet Energy Resolution (use double-sides CB function)
4. Contamination from other backgrounds and signal