Top Mass Measurement in the Lepton + Jets Channel using a Dynamical Likelihood Method(DLM)

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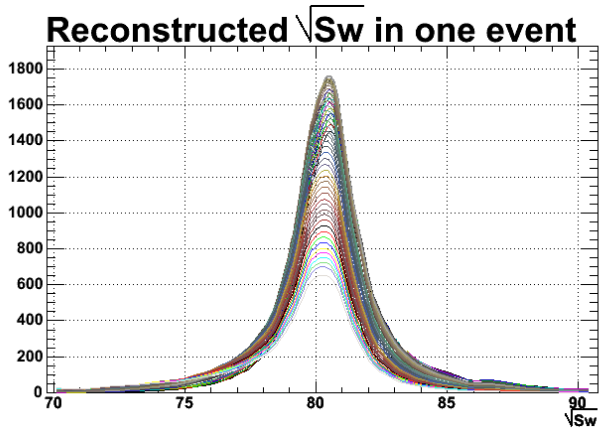
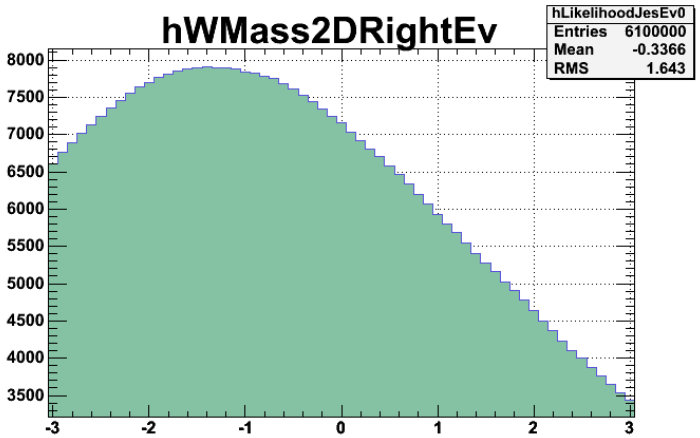
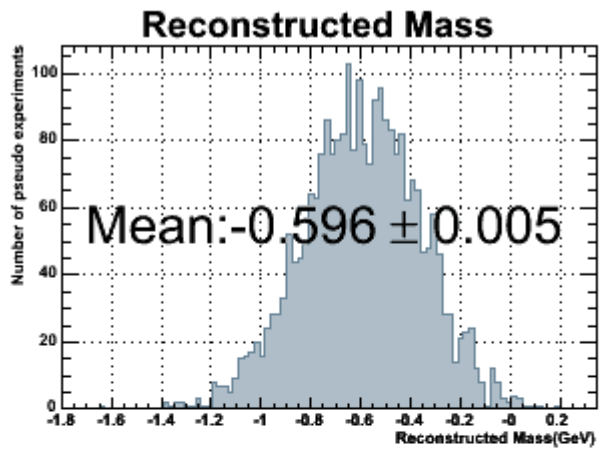
Transfer Function check

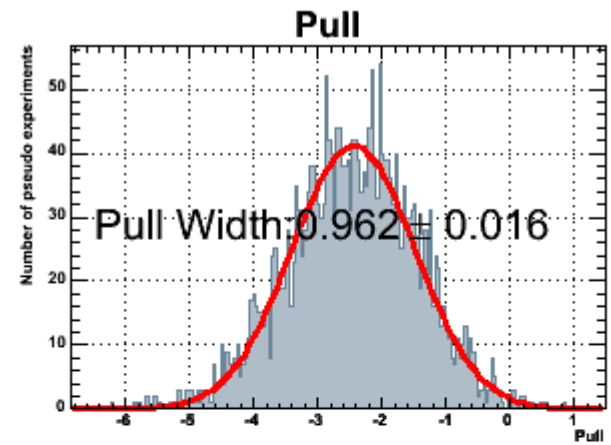


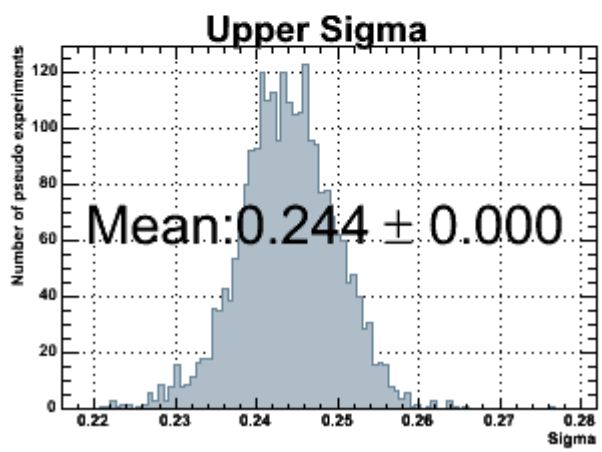
$$L_{ev}(JES) = \frac{1}{(M^2 - S_w)^2 + M_w^2 \Gamma^2} w_{jj}(x; y, JES)$$

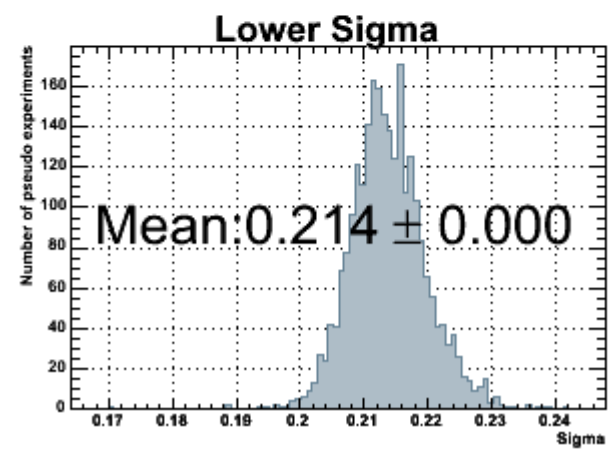
$$L(JES) = \Pi_{ev} L_{ev}(JES)$$



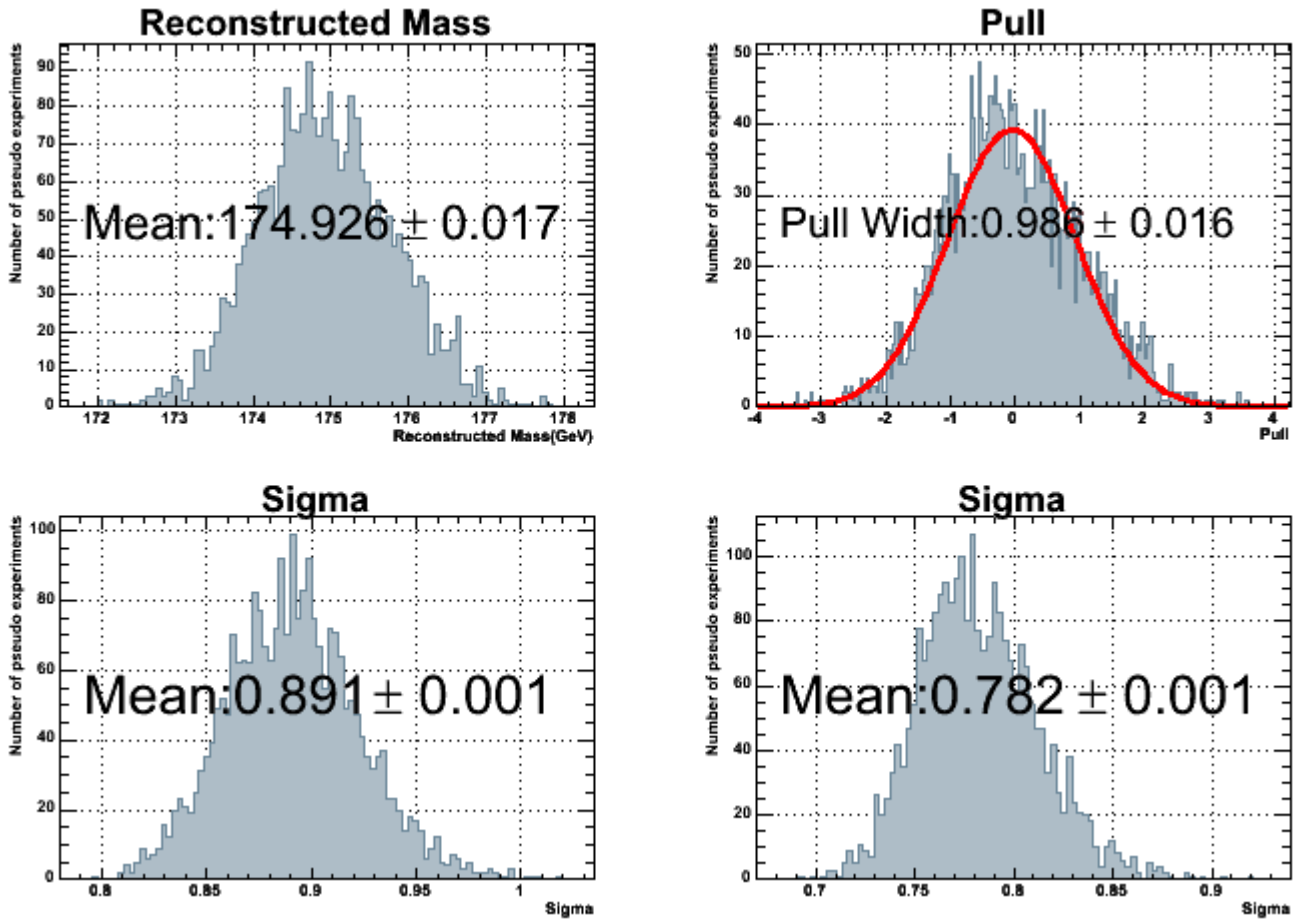




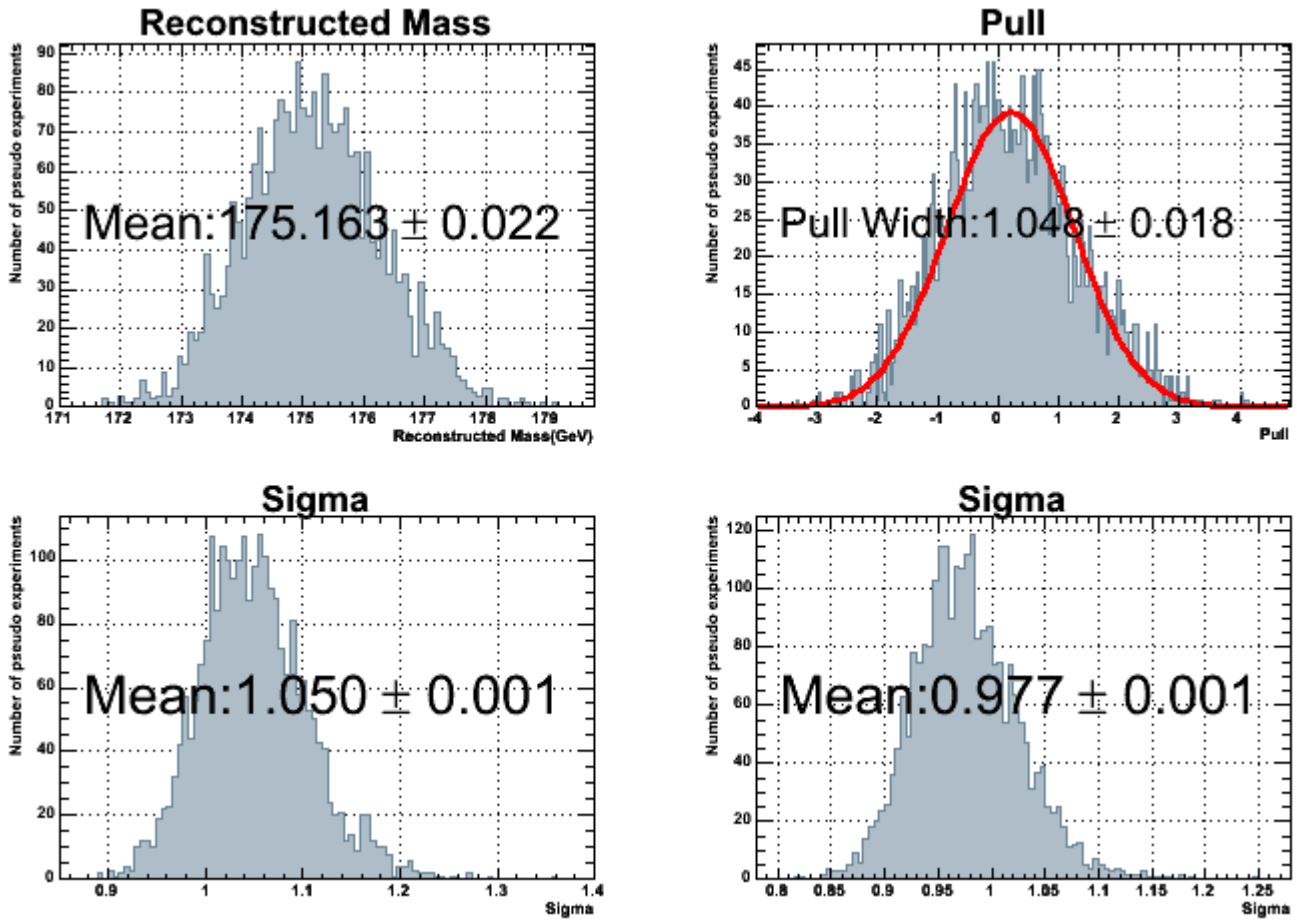




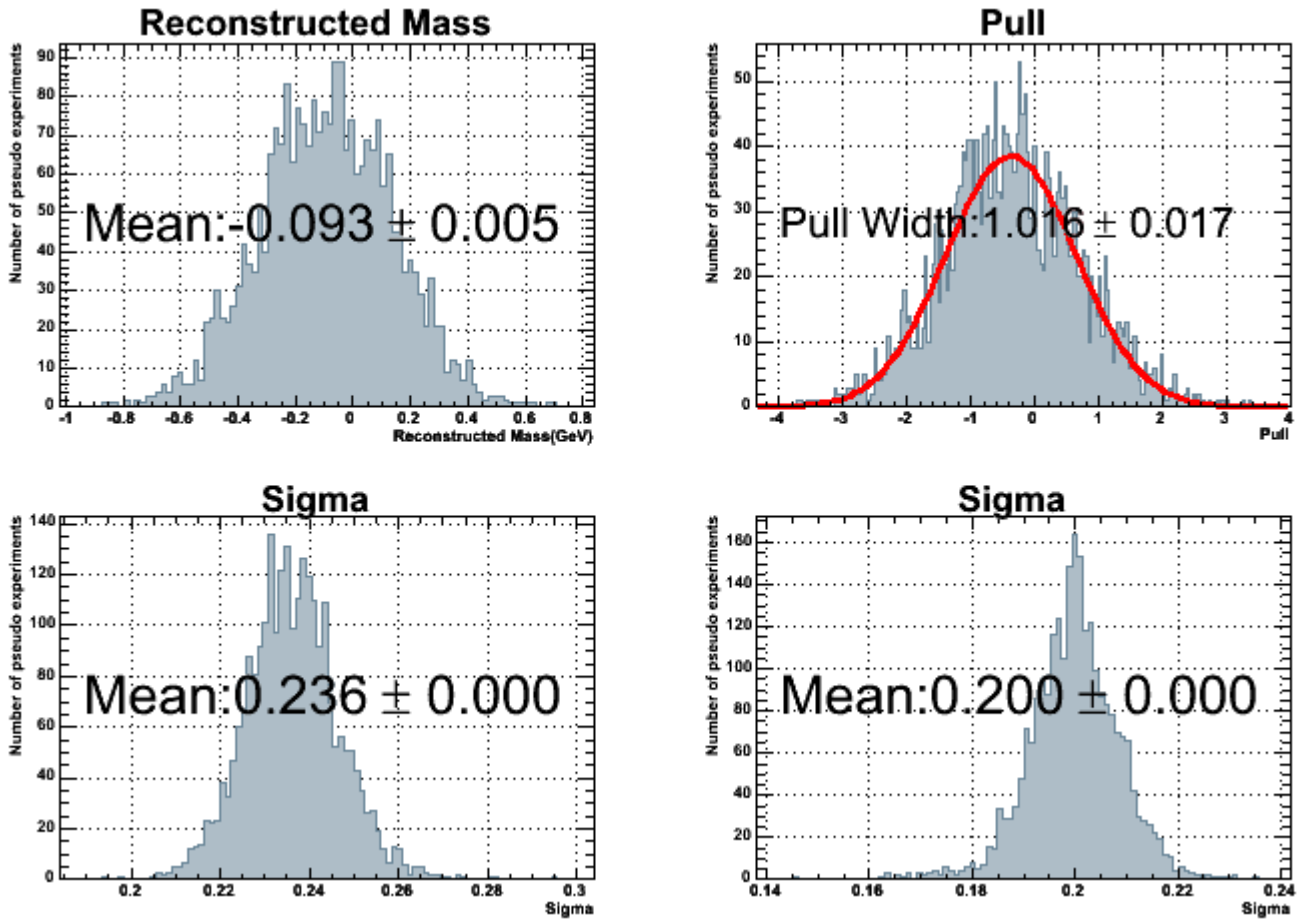
Reconstructed Mass



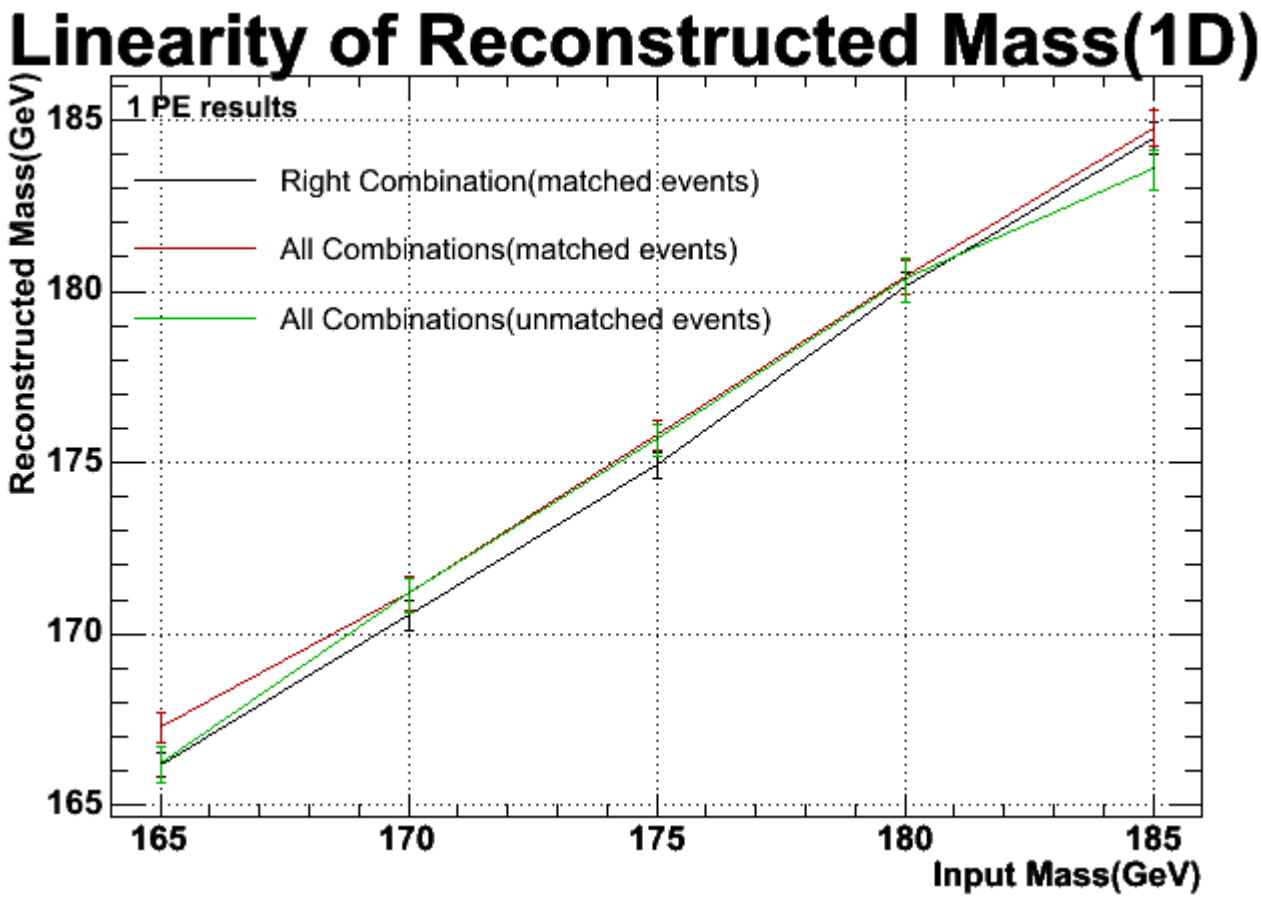
Reconstructed Mass



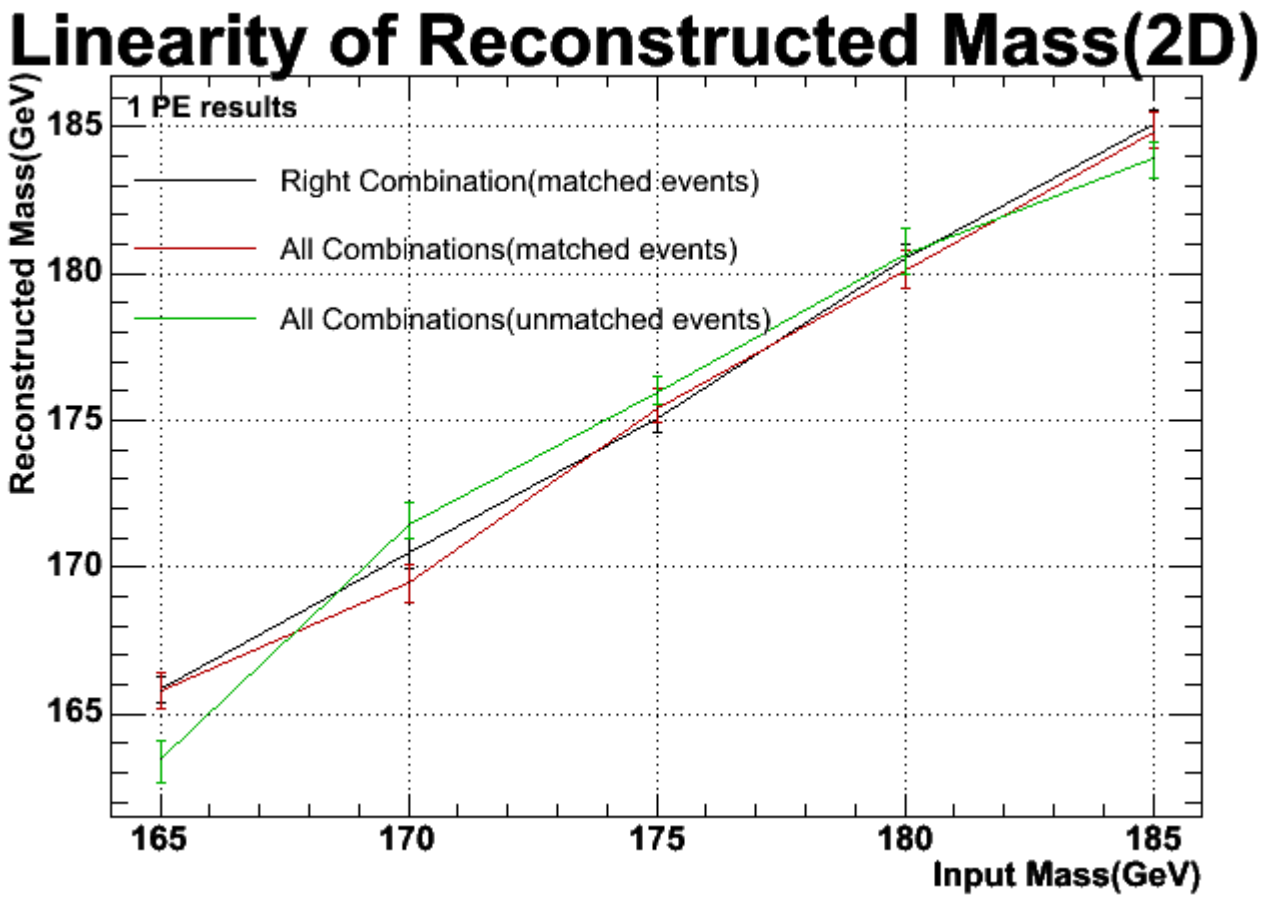
Output JES


Reconstructed Mass
Mean:-0.093 ± 0.005
Number of pseudo experiments
Reconstructed Mass(GeV)
Pull
Pull Width:1.016 ± 0.017
Number of pseudo experiments
Pull
Sigma
Mean:0.236 ± 0.000
Number of pseudo experiments
Sigma
Sigma
Mean:0.200 ± 0.000
Number of pseudo experiments
Sigma

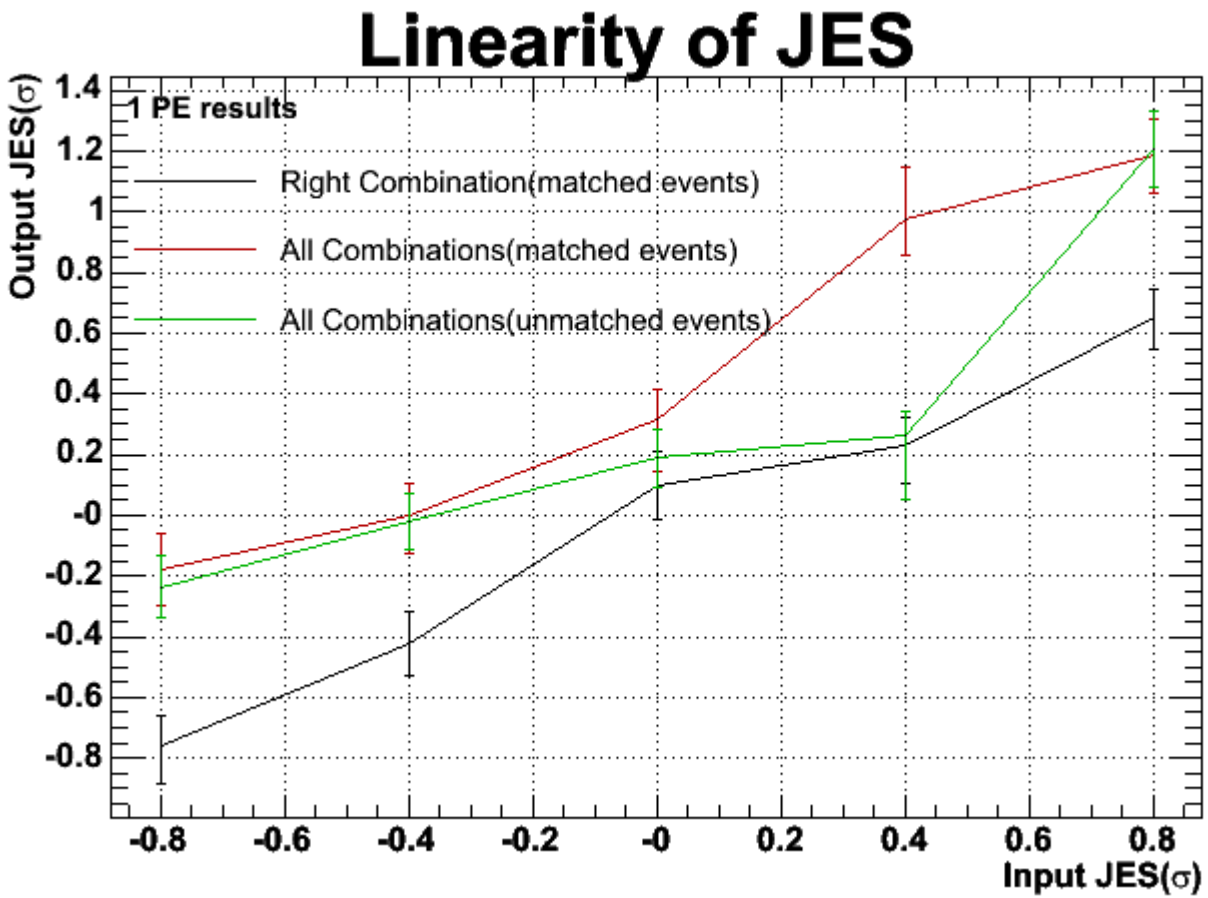
Linearity of Reconstructed Mass



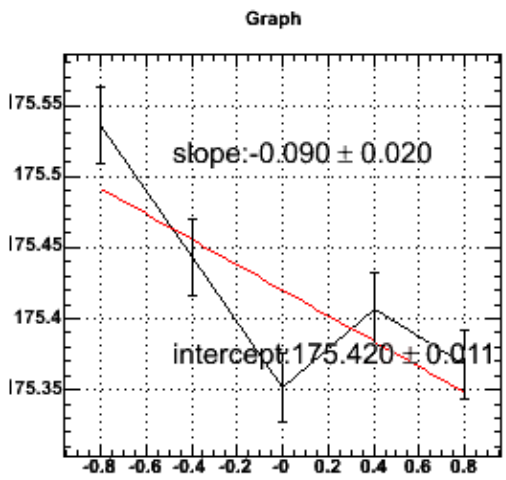
Linearity of Reconstructed Mass

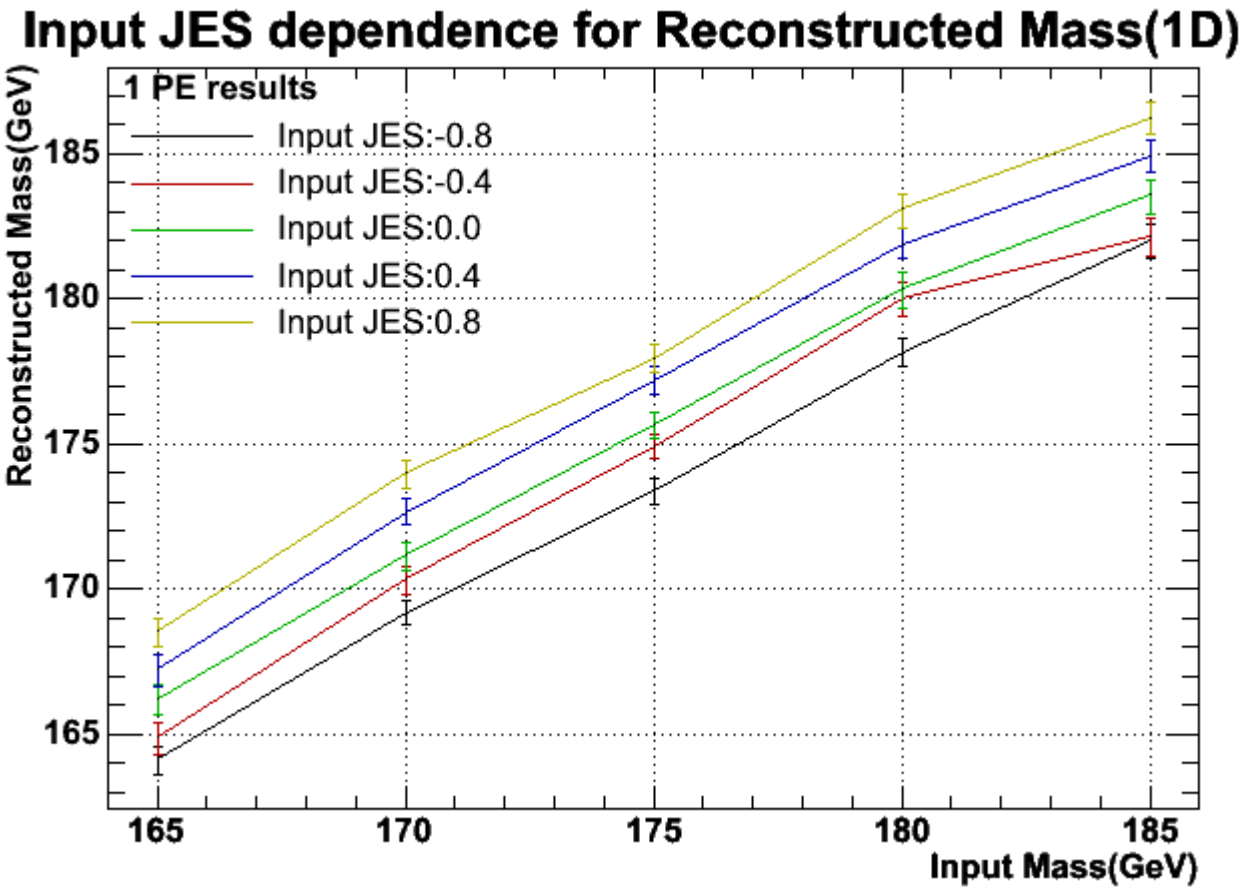
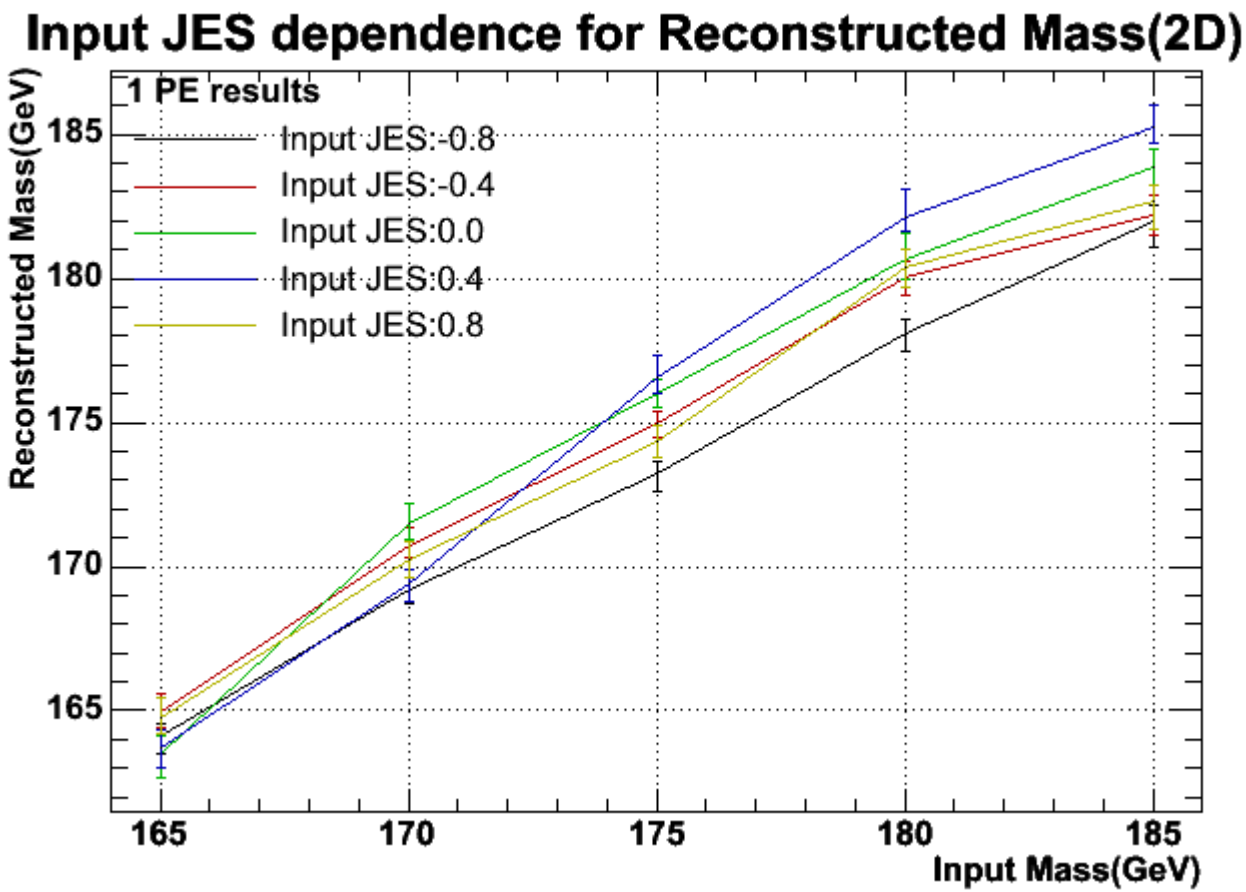


Linearity of JES



JES dependences





JES dependences