

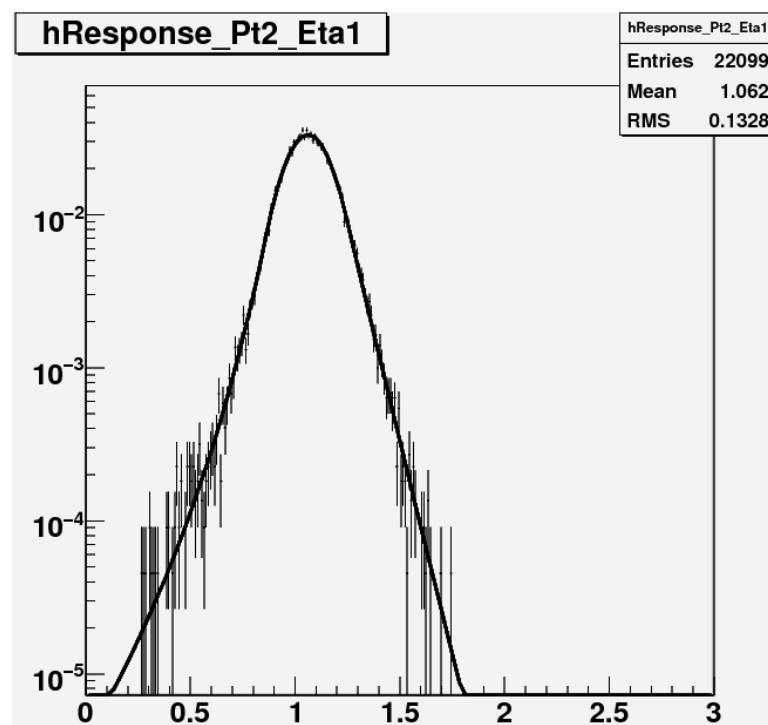
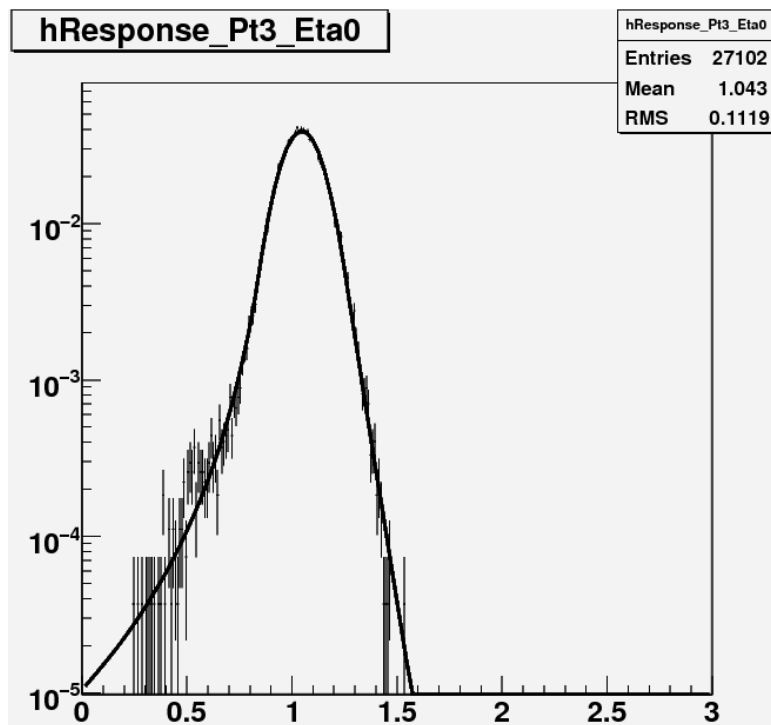
# QCD Event Rebalancing

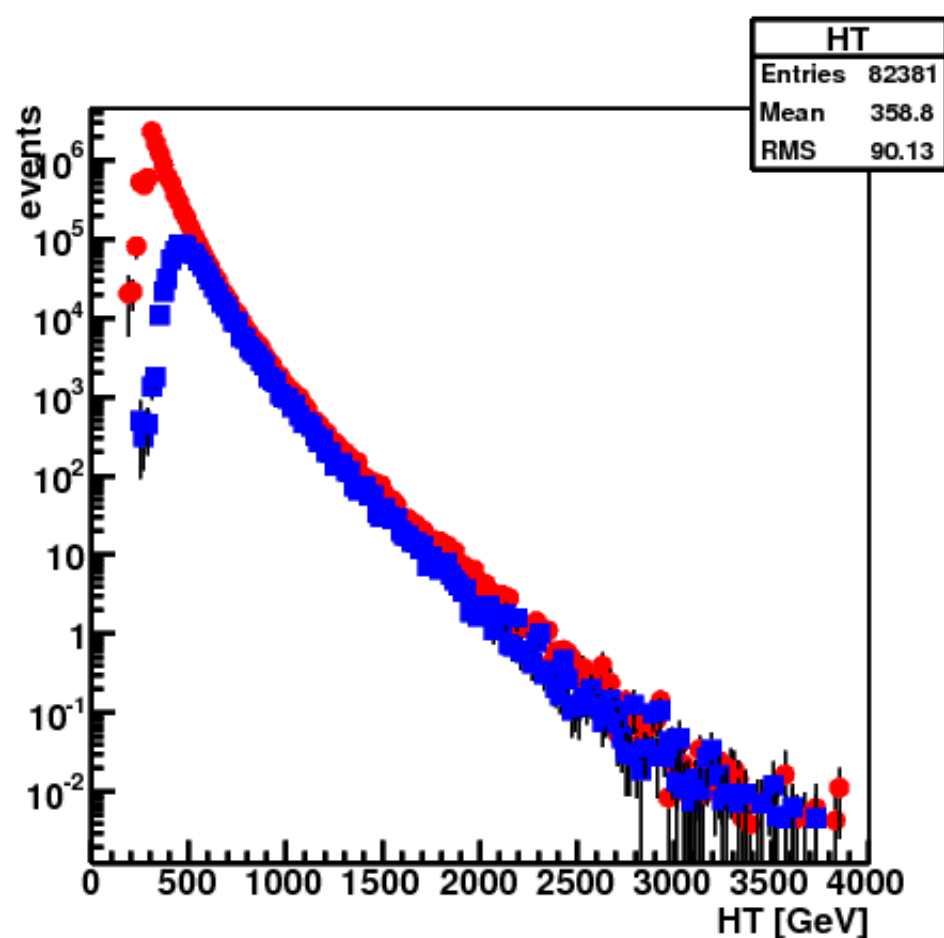
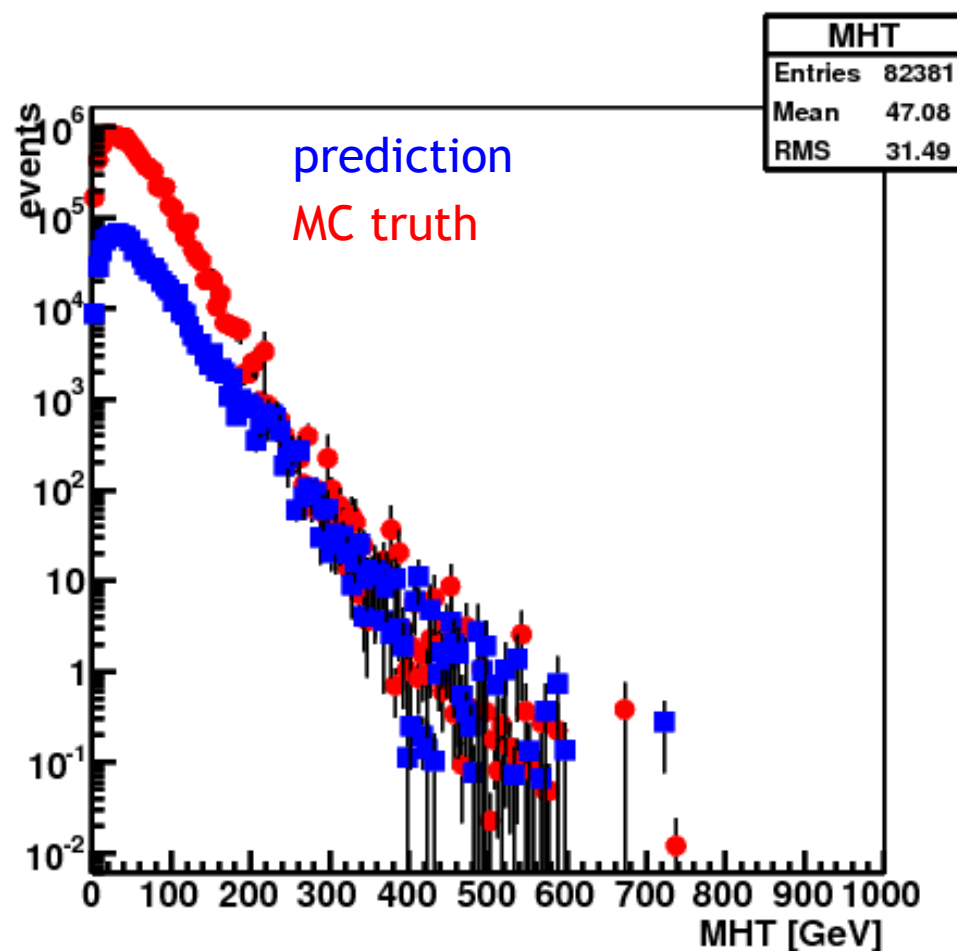
C. Sander, *Hamburg University*

SUSY group meeting – 4<sup>th</sup> May 10

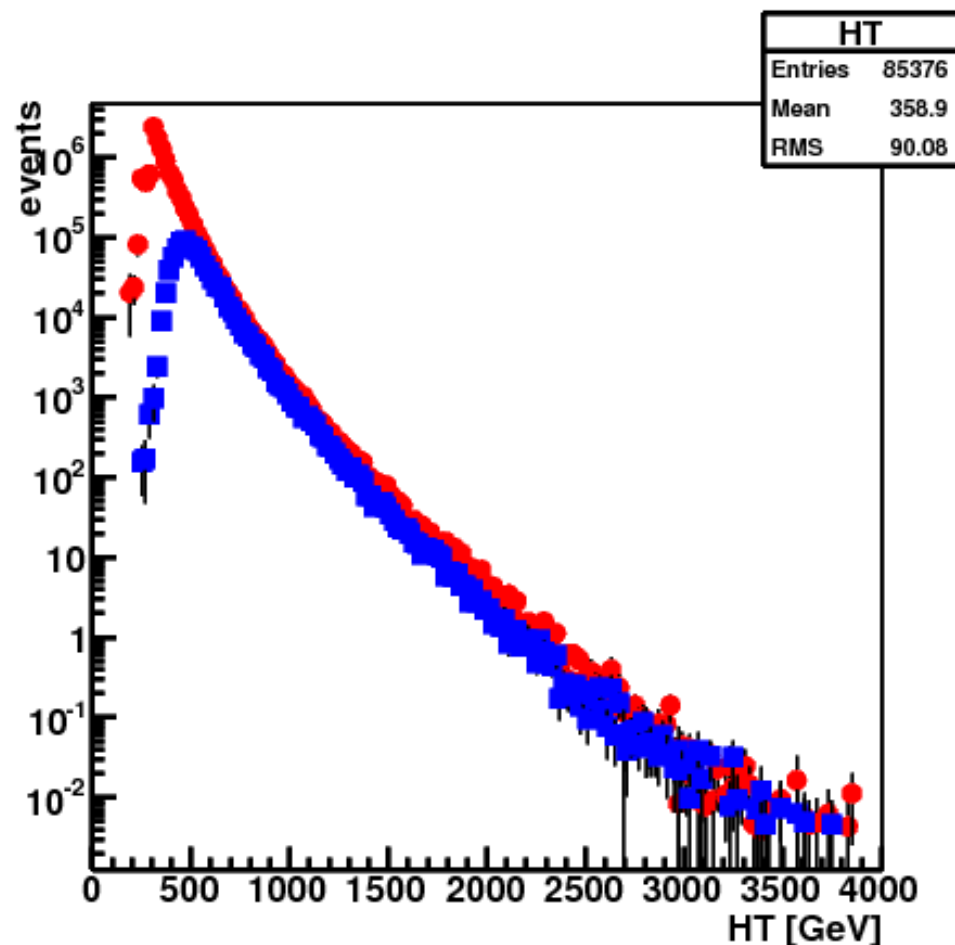
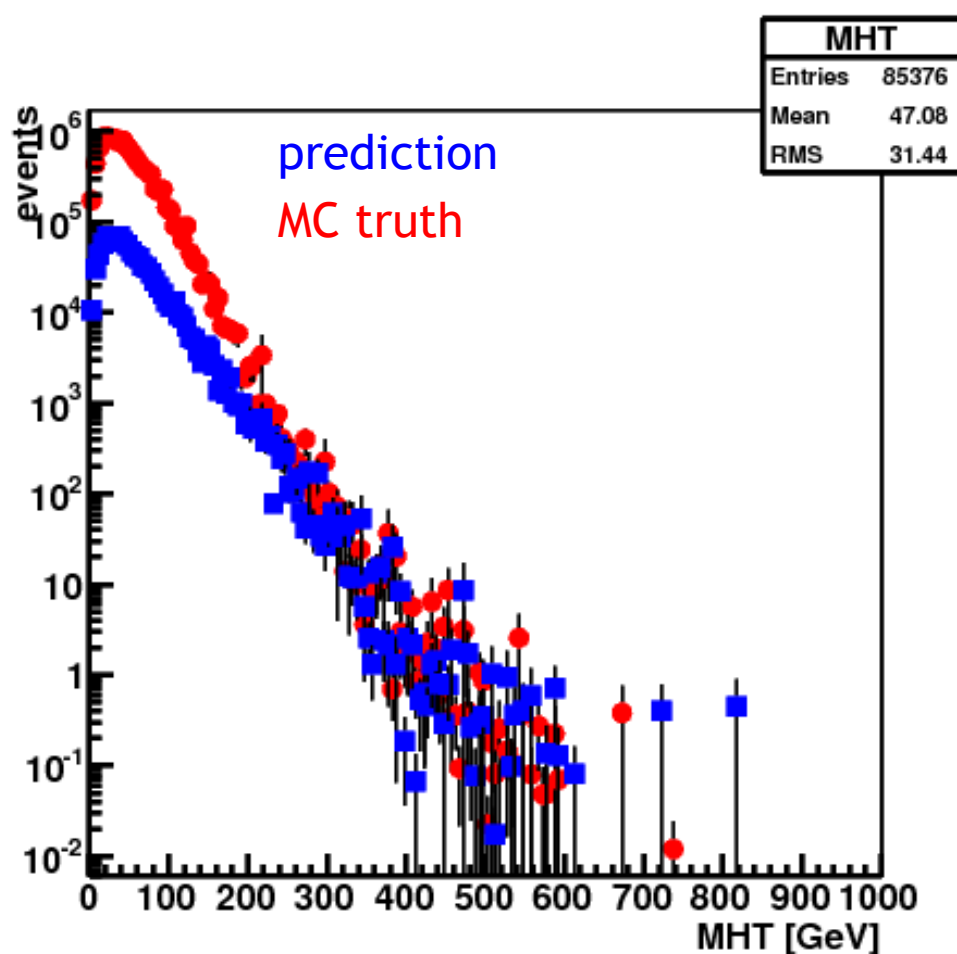
- **Proof of principle:** Smear GenJets ( $p_T > 30$  GeV) with response function determined by GenJet-CaloJet matching
- Fit in various  $p_T$ - $\eta$  or  $E$ - $\eta$  bins response with double sided crystal ball
- If statistics not enough ( $\#entries < 100$ ) assume parameter values, e.g.

$$p_t^2 \cdot \sigma_{p_t}^2 = \left( \frac{1.2}{\sqrt{E}} \right)^2 + 0.03^2$$

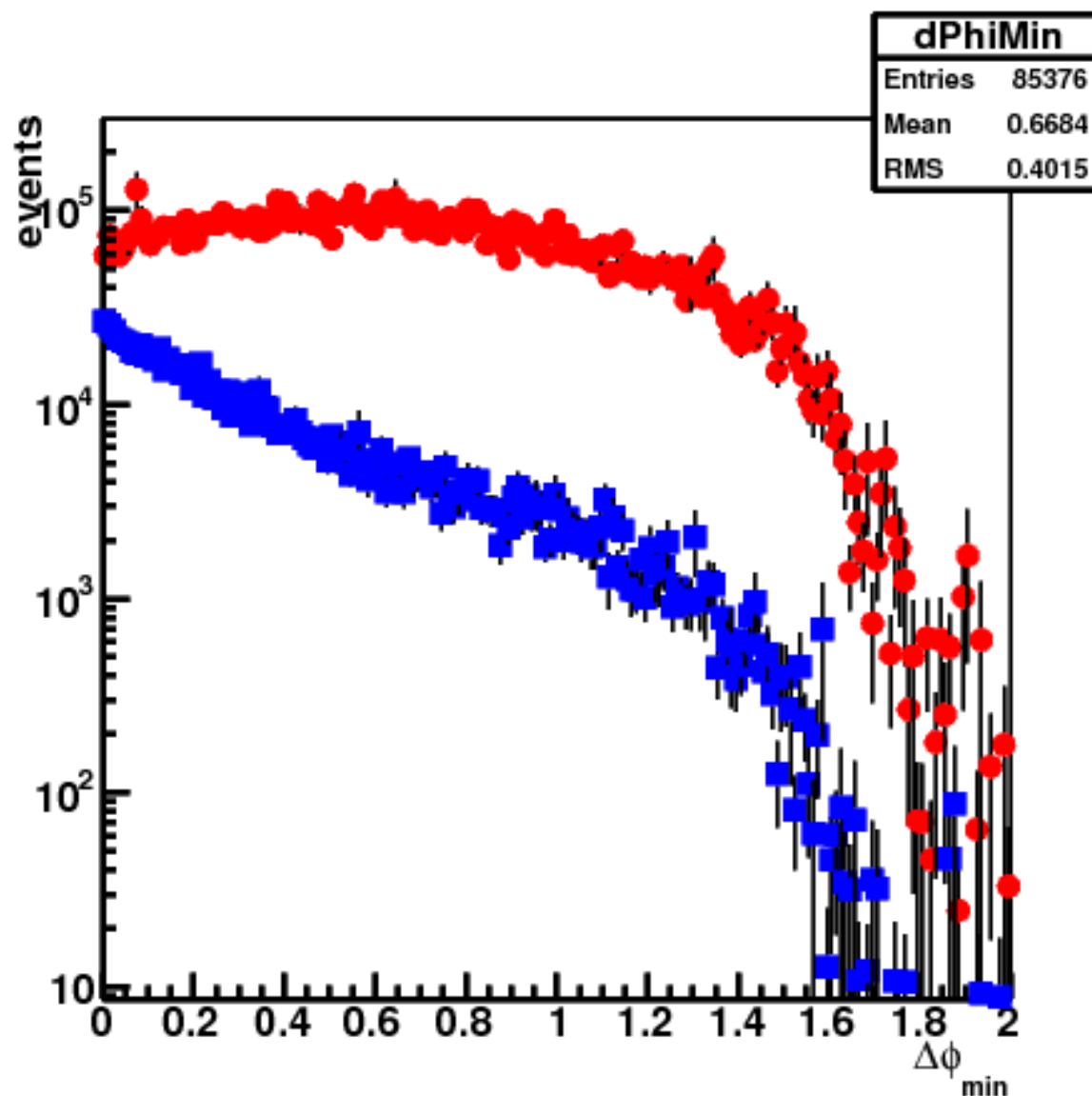




- Overprediction of MHT
- Clear deviation at small HT



- Same behavior for fine and coarse  $p_T$  binning



- Large deviation for minimum  $\Delta\phi$  between MET and leading jets  
→ Something related to tails of response ?

# Response Control Plots - Fine Binning

