

1. Studies of signal and background separation using Mann-Whitney U test and some new methods

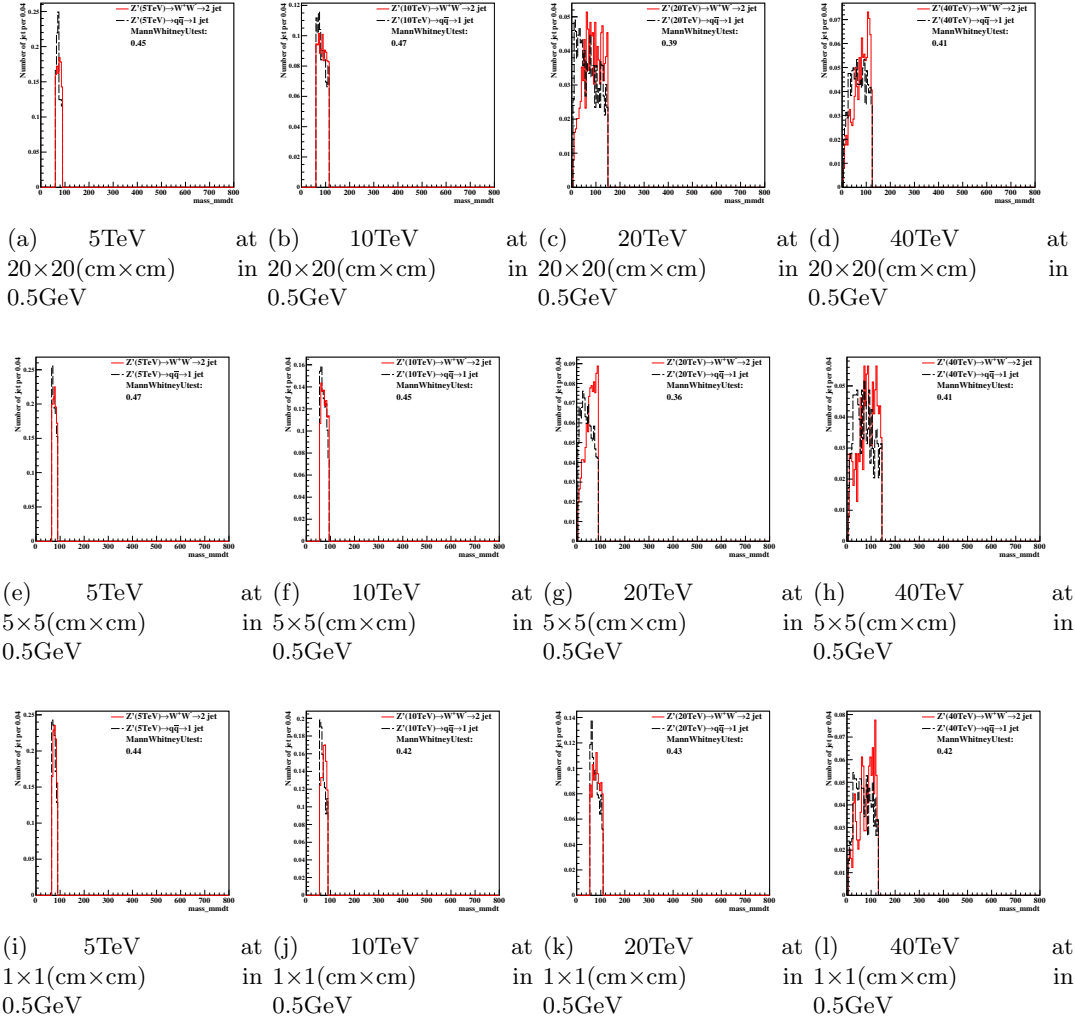


Figure 1: Distributions of Mann-Whitney value U in 5, 10, 20, 40TeV energy collision for c2b1 in different detector sizes. Cell Size in 20×20, 5×5, and 1×1(cm×cm) are shown here.

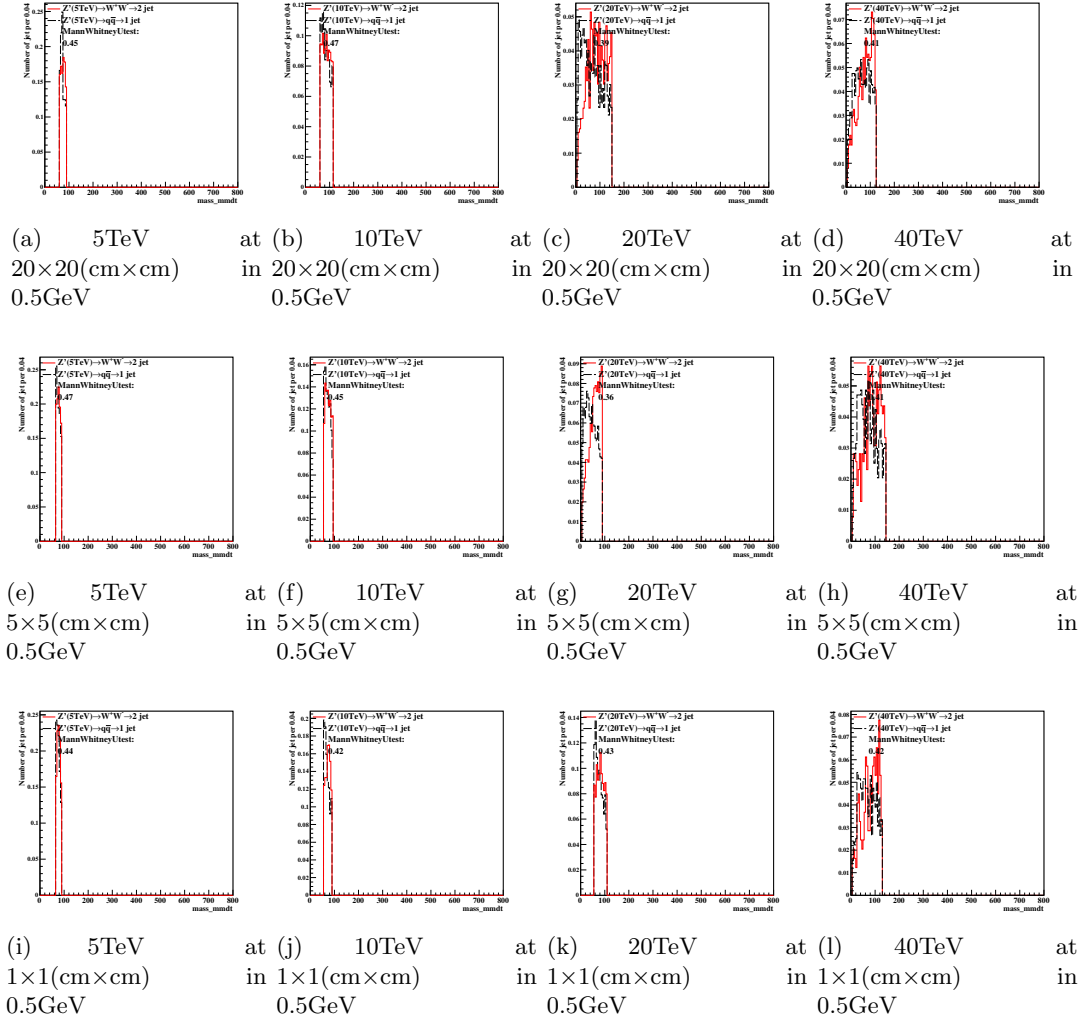


Figure 2: Distributions of Mann-Whitney value U in 5, 10, 20, 40TeV energy collision for τ_{21} in different detector sizes. Cell Size in 20×20 , 5×5 , and $1 \times 1(\text{cm} \times \text{cm})$ are shown here.

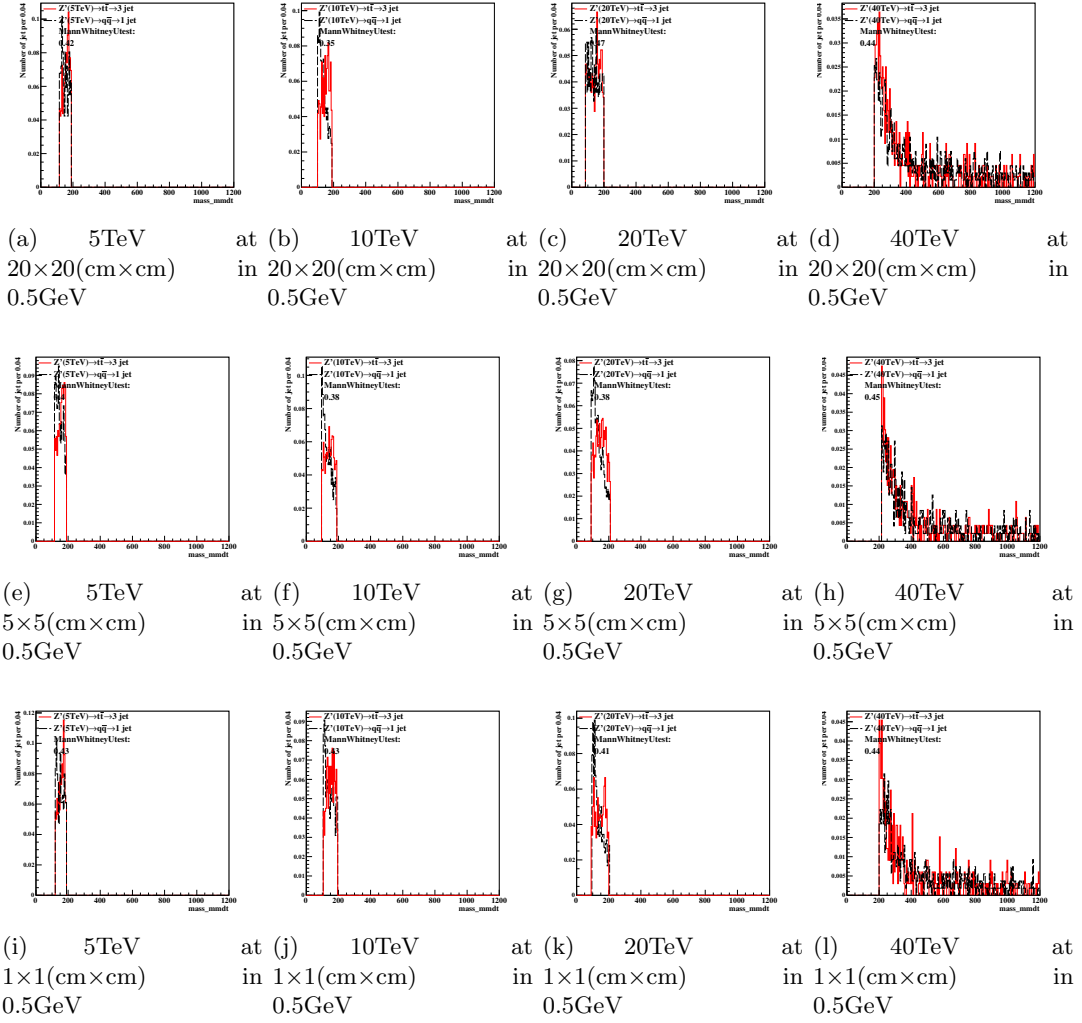


Figure 3: Distributions of Mann-Whitney value U in 5, 10, 20, 40TeV energy collision for τ_{32} in different detector sizes. Cell Size in 20×20 , 5×5 , and 1×1 (cm x cm) are shown here.