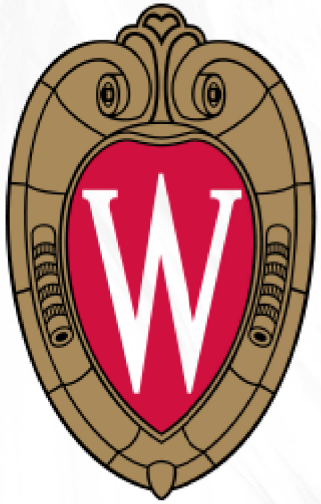
W W + 2 jets Analysis



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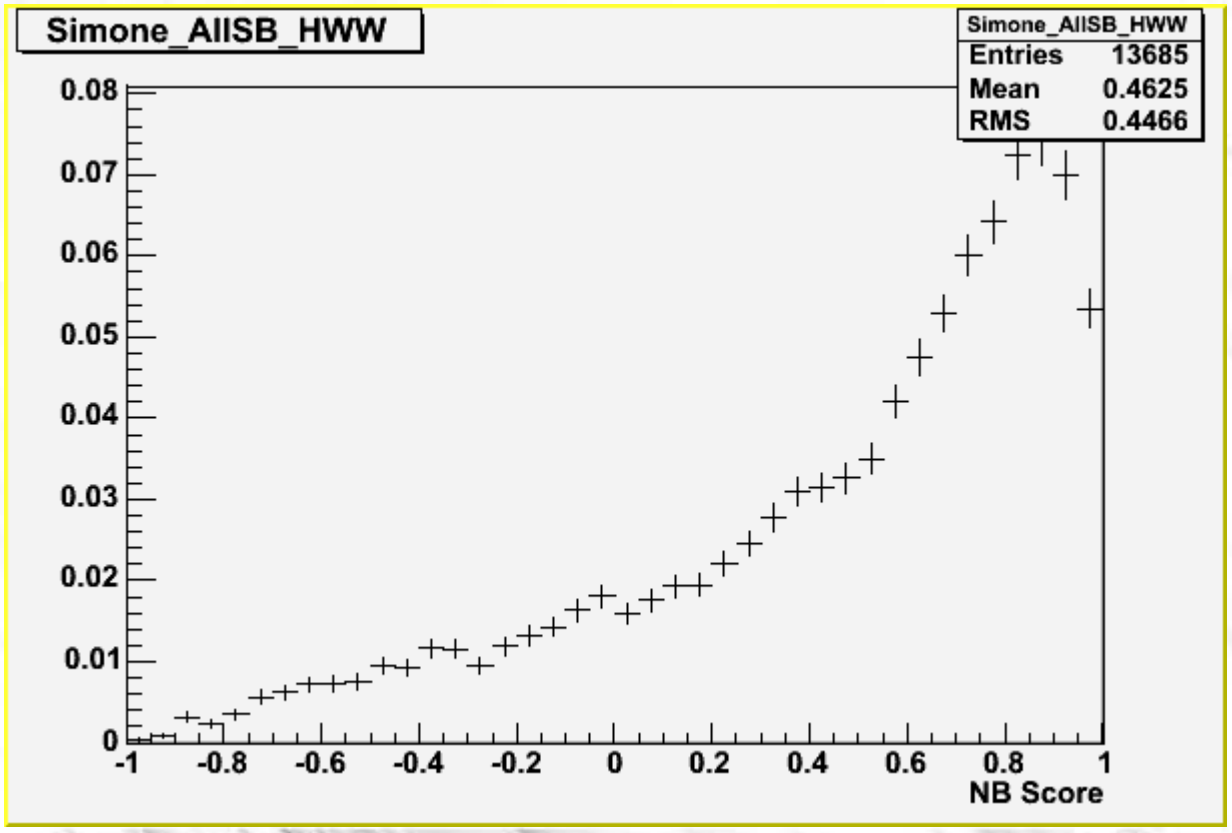
12/12/11

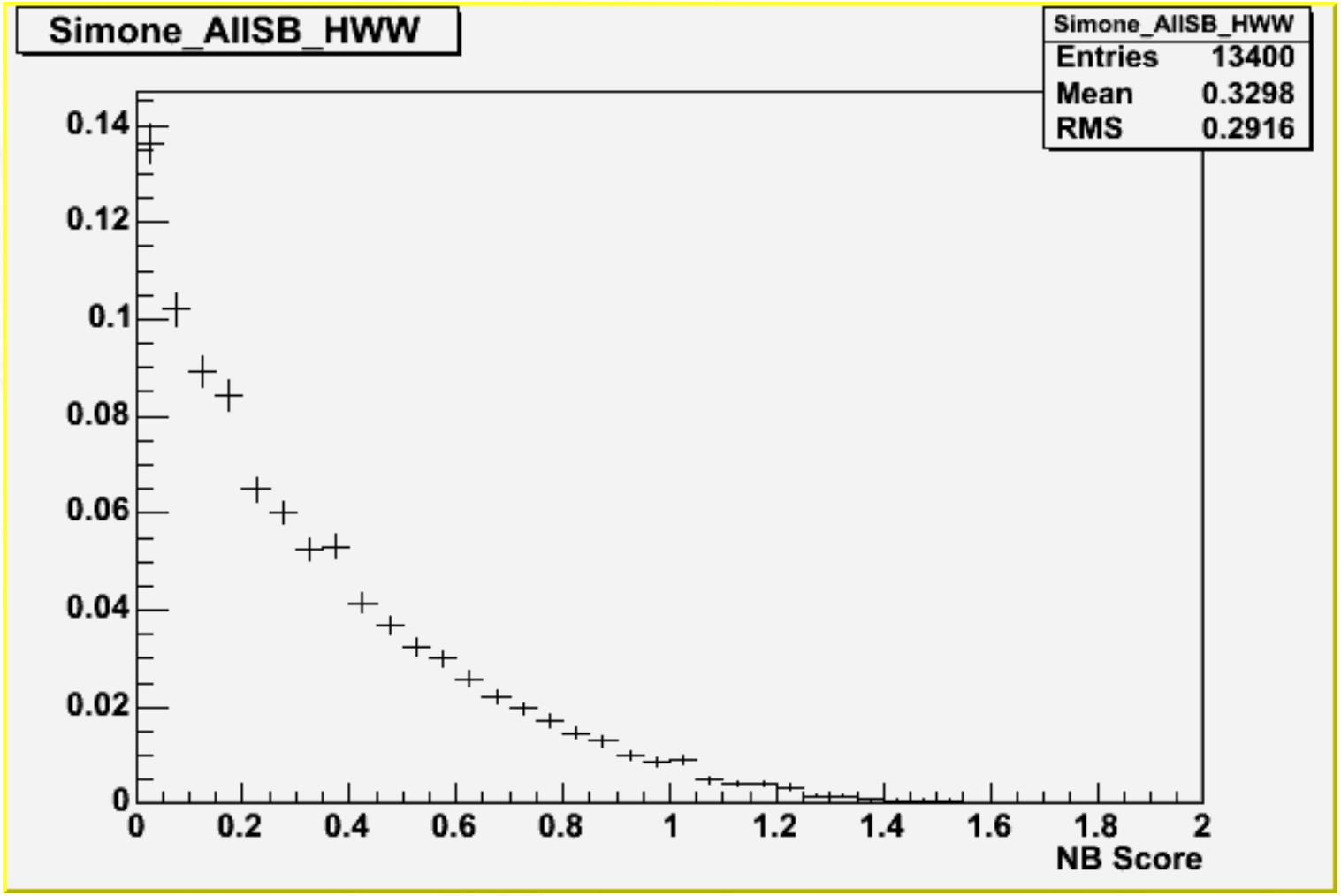
W W + 2 Jets Analysis

- Separating ggH NN
- ggH jet kinematics not well modeled
- Train two separate neural nets (ggH, VBF/VH), choose higher score.
- 23% of ggH events score higher in the VBF/VH NN.



W W + 2 Jets Analysis

- For ggH events that scored higher in the VBF/VH neural net, the difference in NN scores tends to be small.



NN(VBF/VH) - NN(ggH)

W W + 2 Jets Analysis

- Correlation between difference and score. This is only the ~25% of ggH events that scored higher in VBF/VH