

# $H \rightarrow W W + 2 \text{ jets}$ Analysis



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*of*  
WISCONSIN  
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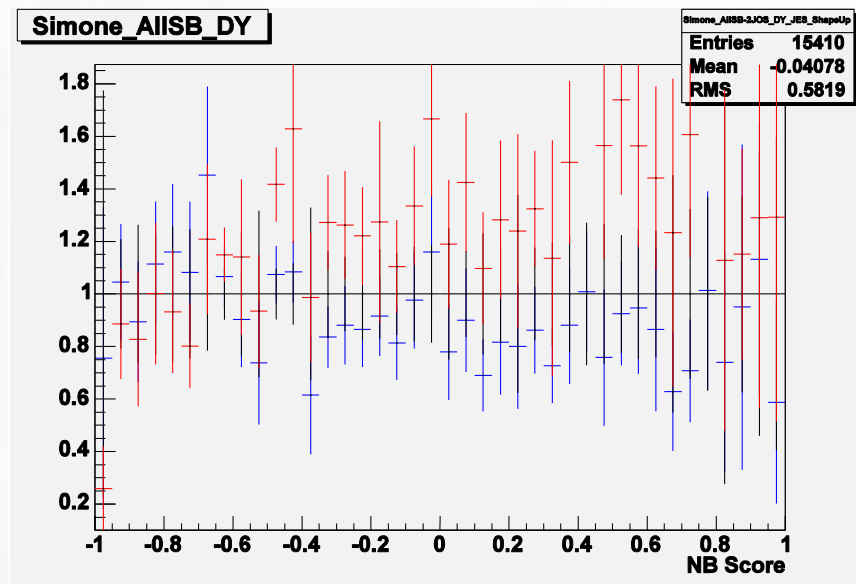
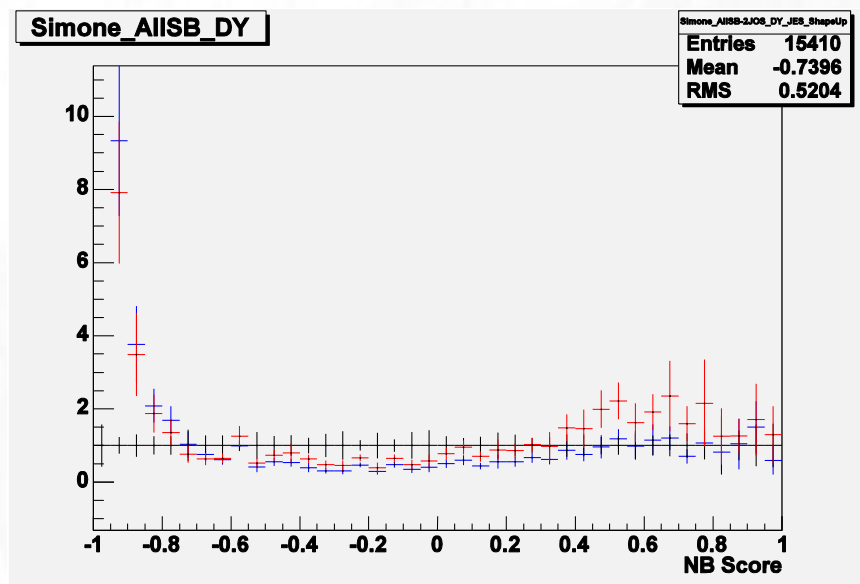
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# Update

- Sergo found a problem with DY systematics at 165 GeV
- My error: bad filenames
- Fixed, checked DY systematics in all other templates
- Remaking 4<sup>th</sup> gen limits

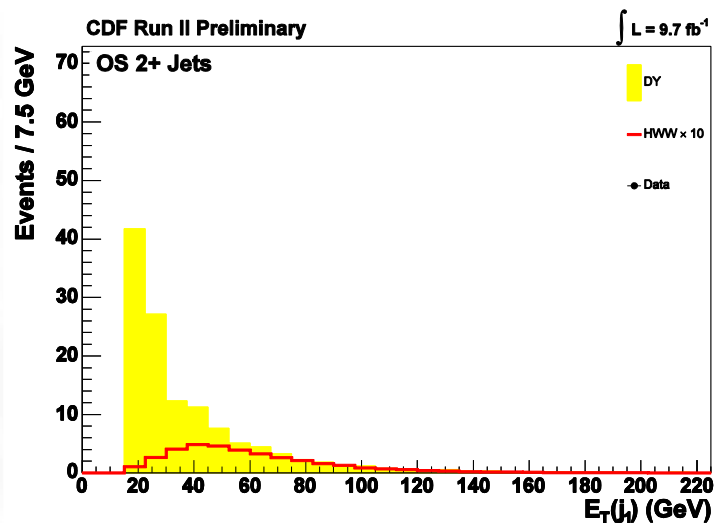
# DY systematic plots



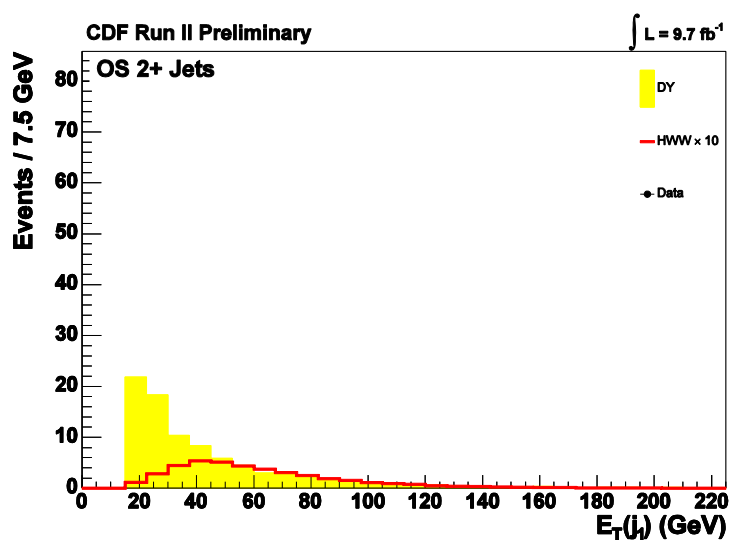
Neural Net Scores: +JES systematic, Median value, -JES systematic

- In left plot (before fix) the two systematics look more like each other than like the median values
- After fix systematics differ
- Minus systematic is more signal-like (see next slides)

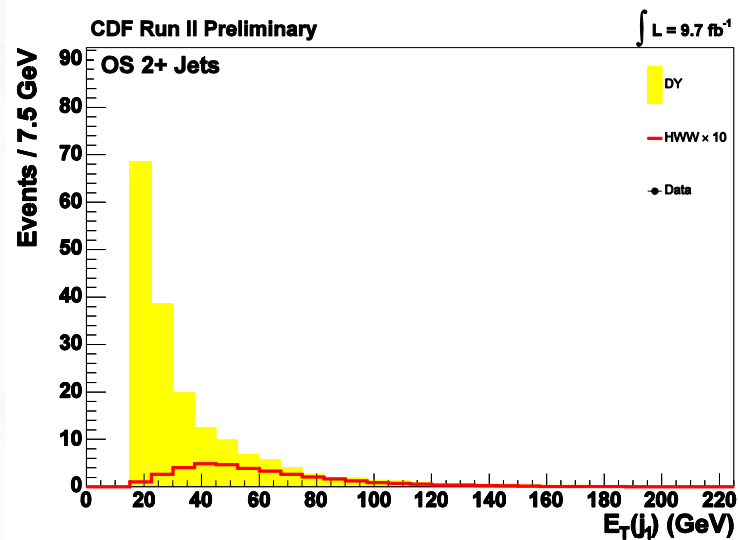
# DY systematics – Jet1\_Et



Median

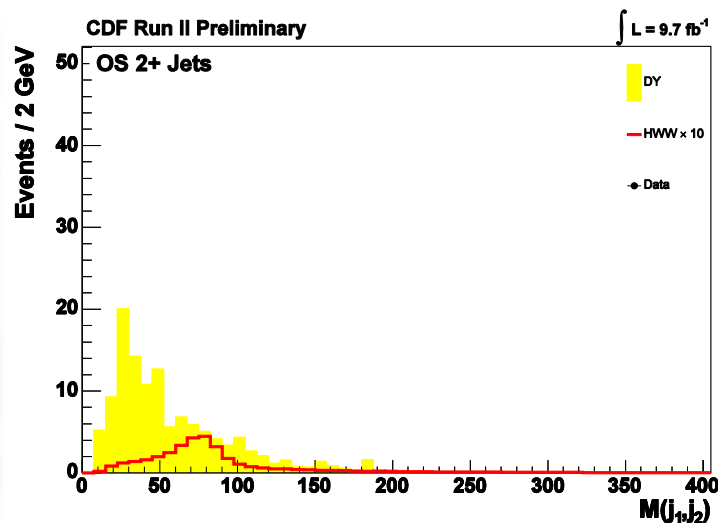


Minus Systematic

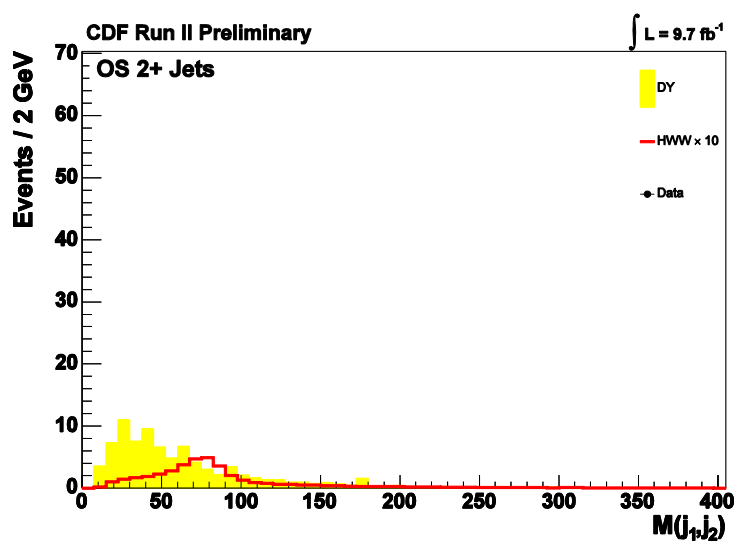


Plus Systematic

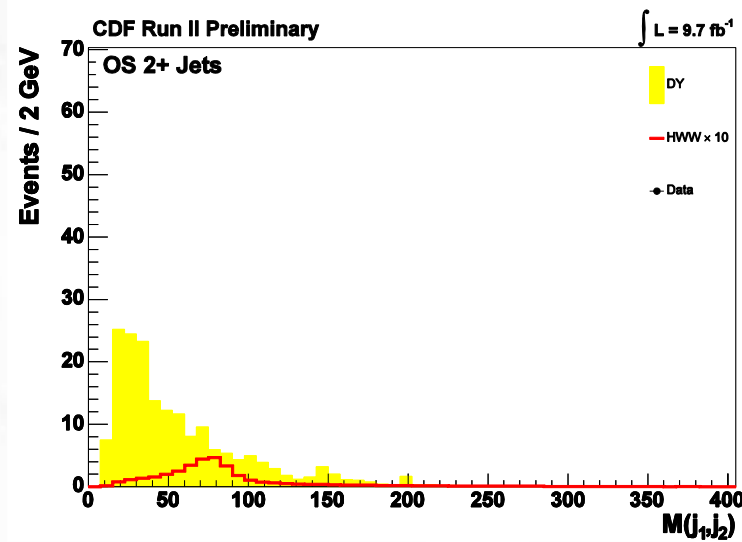
# DY systematics – JetMass



Median

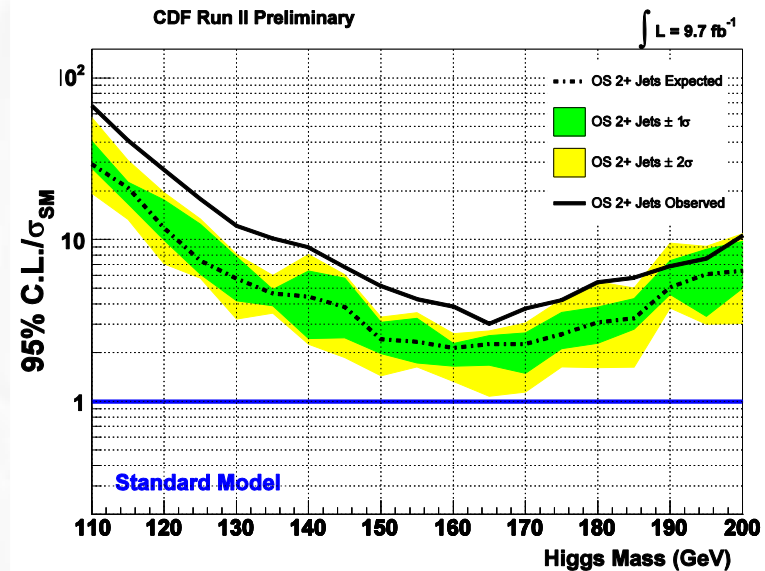
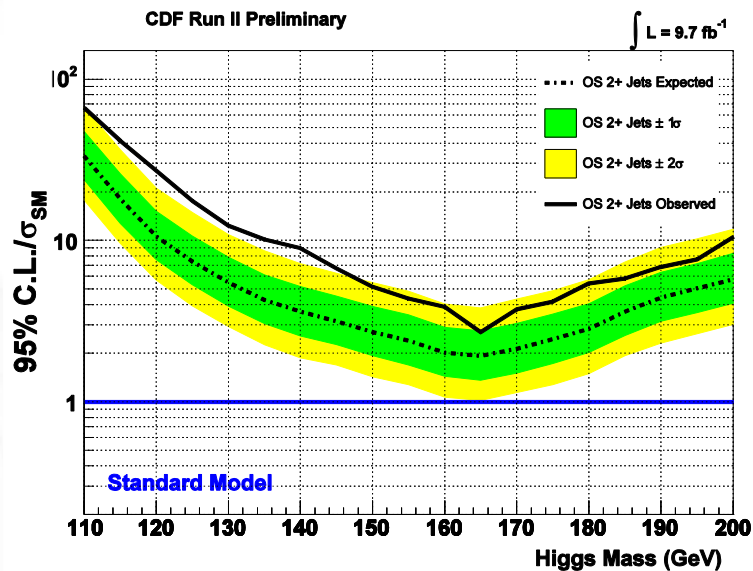


Minus Systematic



Plus Systematic

# Limits Before and After



Note: Ignore +/- bands in second plot!

- Working with Sergo to fix this plot, but median values appear to be valid
- Change is smaller than random variations in limits
- Not surprising, Drell-Yan is not very signal-like