H → W W + 2 jets Analysis

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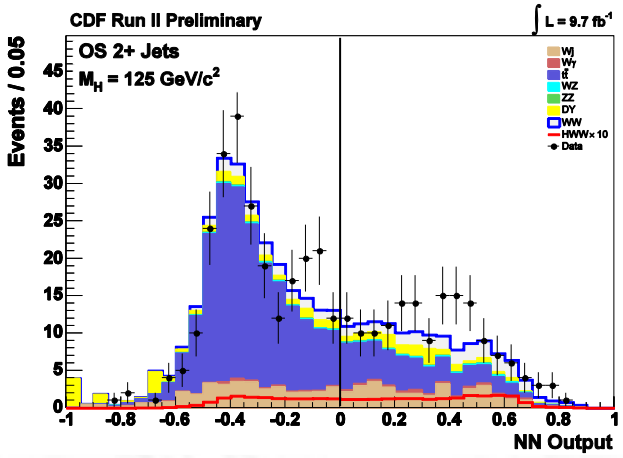
05/21/12

HOBIT

- Jet matching fixed (problem with hobit db file)
- 99.5% matching everywhere
- WW results:
    - ttbar is btagged at 0.72(0.93) operating point
    - 84%(74%) ttbar reduction (SecVtx gave 56% ttbar reduction)
    - Temporary scale factor of (1-0.089)^2 [(1-0.026)^2] applied to all other MC
    - No data yet
- Need to include MC scale factors
    - Different scale factors for heavy and light jets
    - Need MC jet flavors
- No-Silicon scaling? (only requirement for HOBIT tagging is 1 Tight SecVtx track)

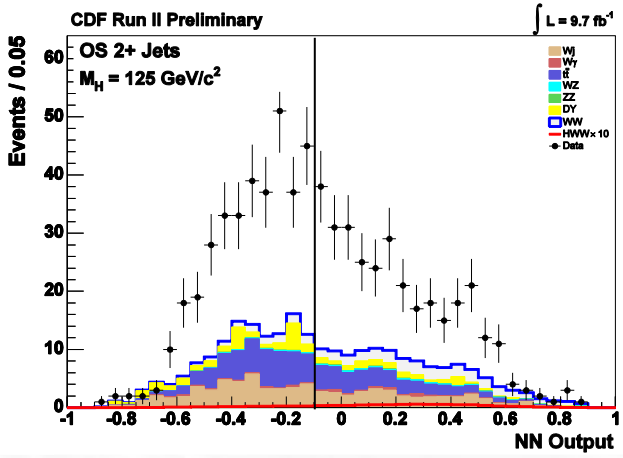
Leading Jet Detector Eta

SecVtx



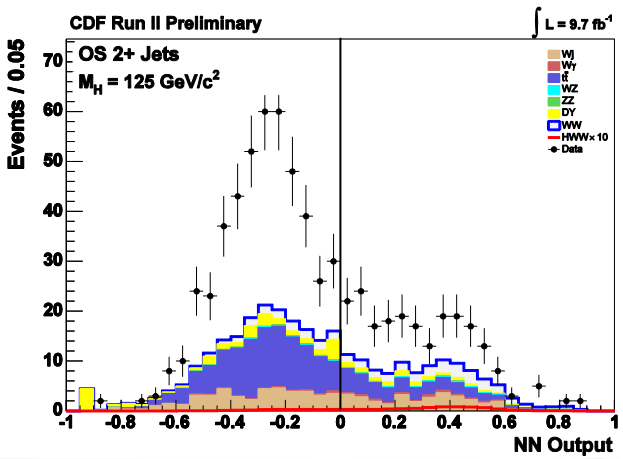
W+jets	28.6
Wγ	3.8
tt	45.2
WZ	2.6
ZZ	0.7
DY	11.5
Background	92.5
WW	26.7
WW/Total	22.4%

~70% HOBIT Btag



W+jets	26.7
Wγ	3.4
tt	35.2
WZ	2.7
ZZ	0.78
DY	10.0
Background	78.8
WW	27.7
WW/Total	26.0%

~55% HOBIT Btag



W+jets	28.7
Wγ	3.8
tt	33.8
WZ	2.6
ZZ	0.71
DY	8.6
Background	78.2
WW	27.0
WW/Total	25.7%