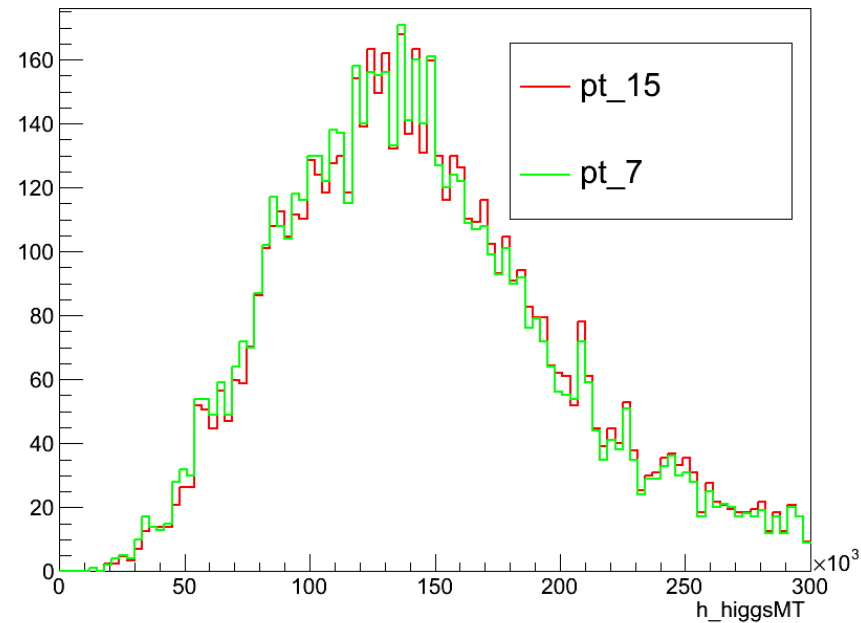
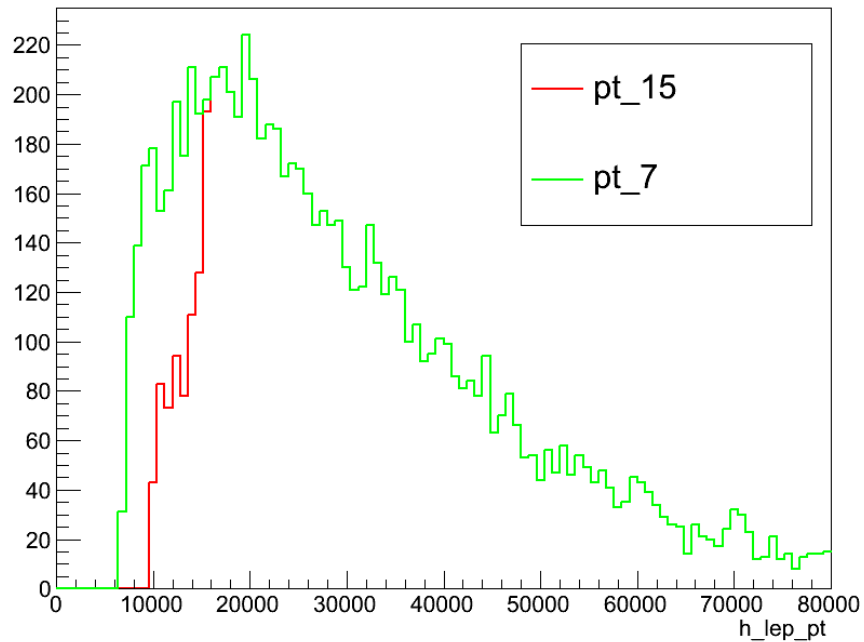
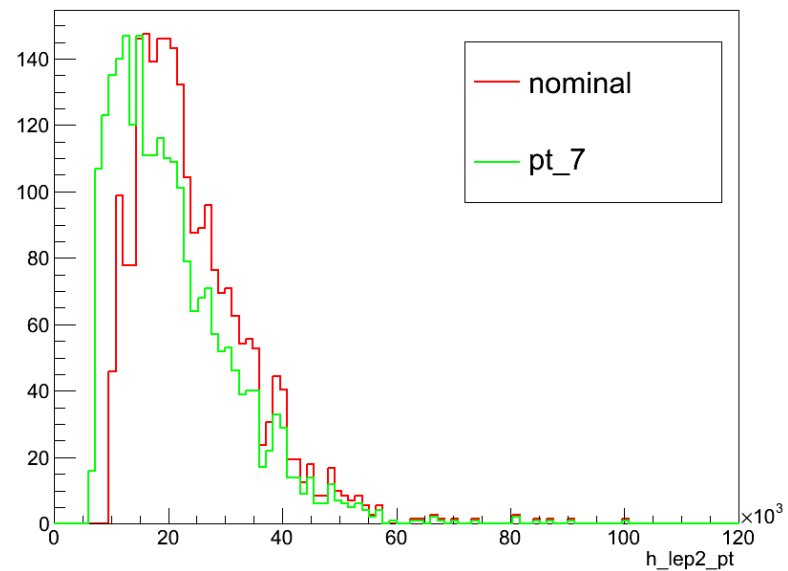
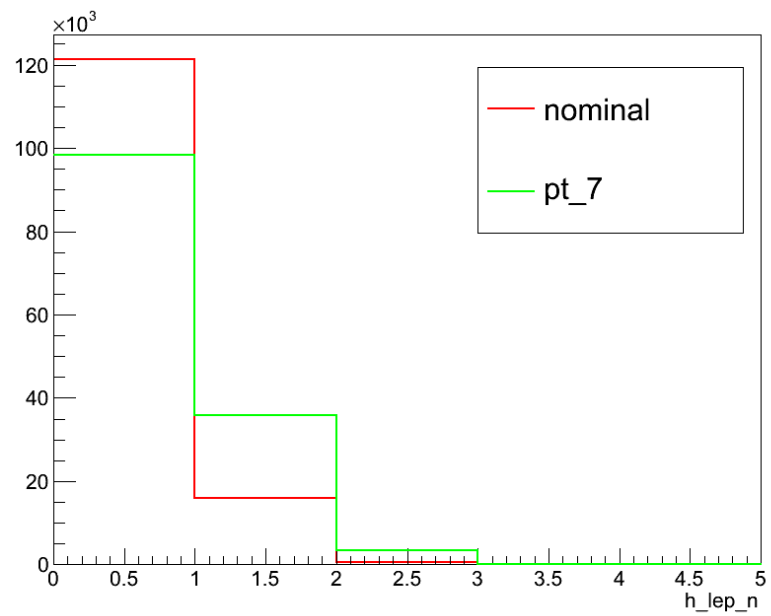
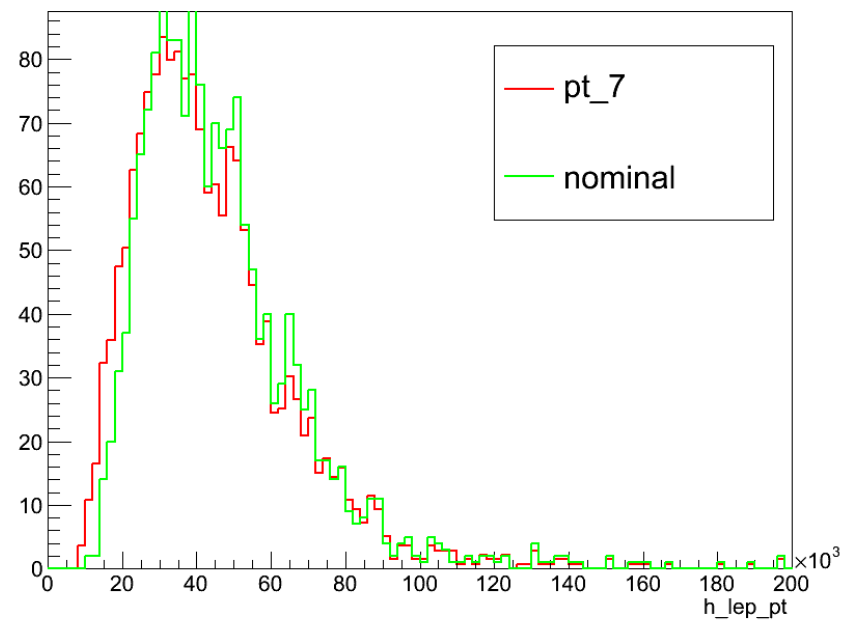


Change to 7?

	Cut	Events ledf	Final Efficiency
2 lep case	15	1497/25142	6%
	7	2093/25142	8%
1 lep case	15	7743/107756	7%
	7	8856/107756	8%

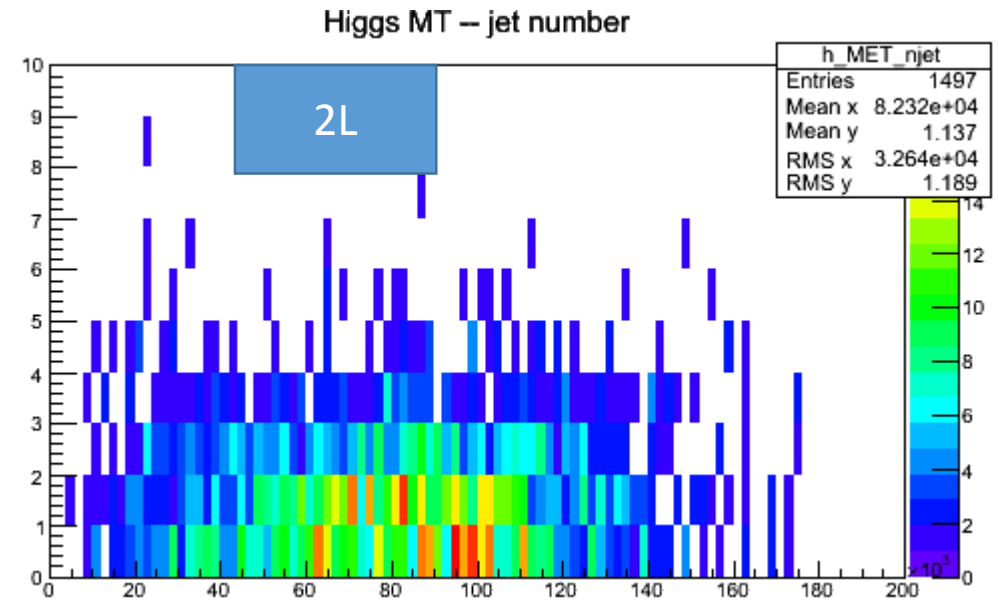
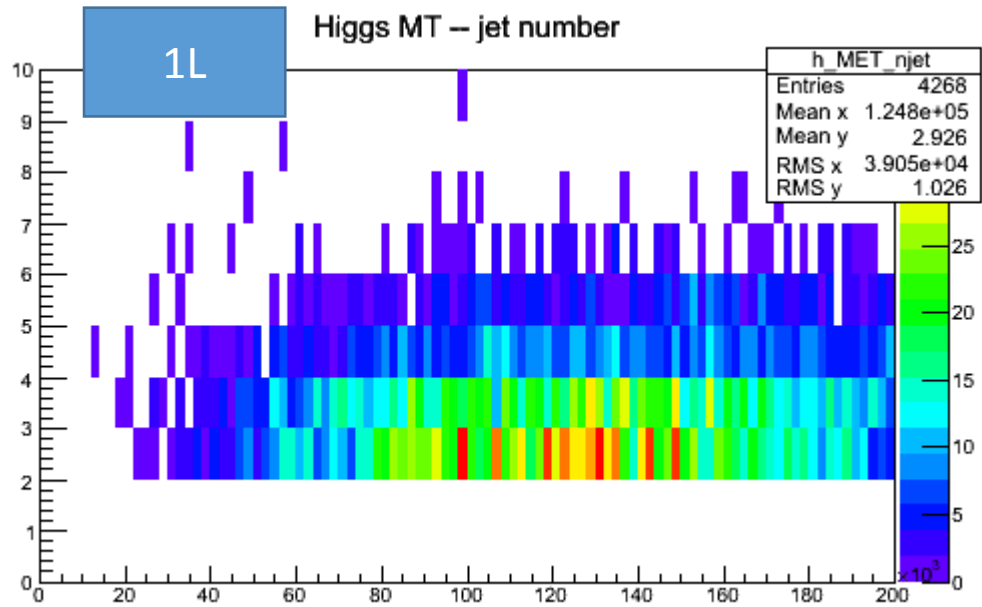




Bveto effect

MV1	B-tagging eff	Tth	Signal
0.39	80%	52%	92%
0.81	70%	59%	96%

Jet multiplicity effect



Expected events in signal region

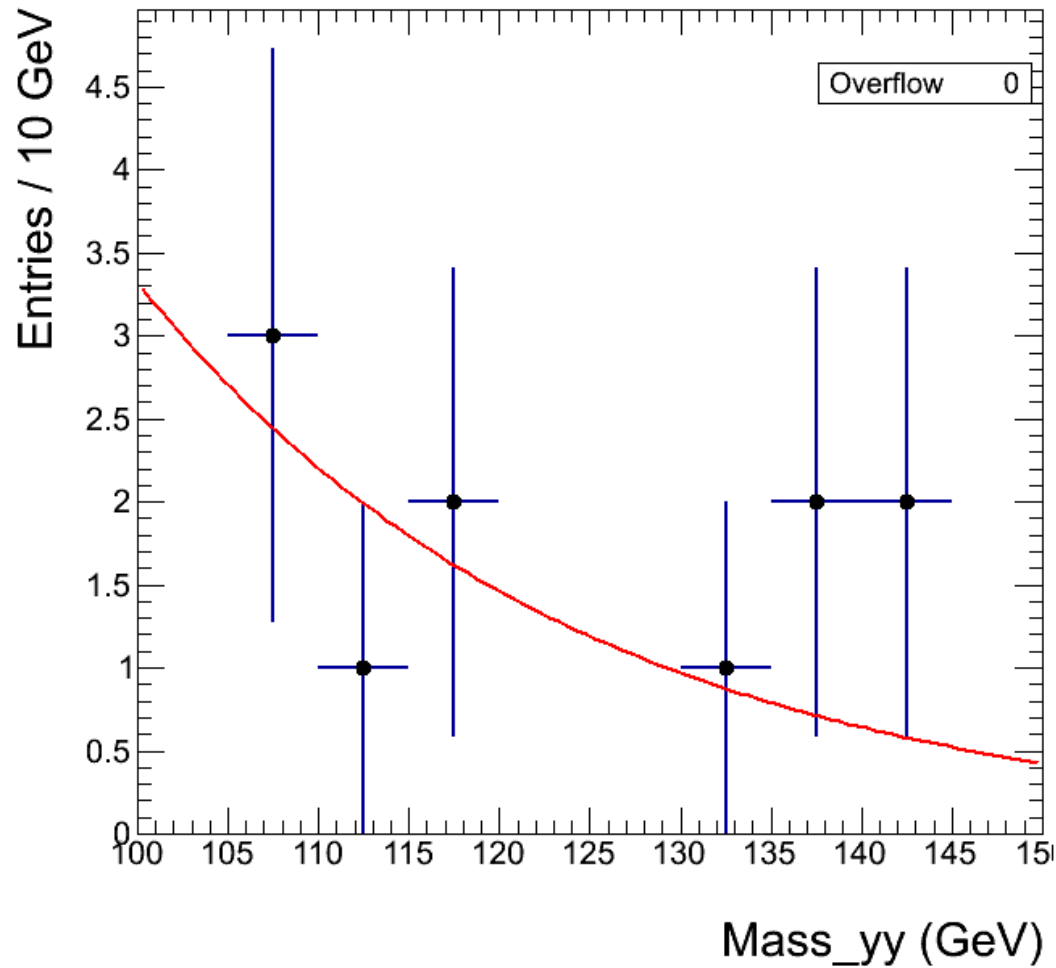
1L

- $x_s(pp \rightarrow H \rightarrow hh) * 2 * Br(h \rightarrow yy) * Br(h \rightarrow ww) * 2 * Br(w \rightarrow lv) * Br(w \rightarrow jj) * eff *$
 $= x_s * 0.00228 * 0.215 * 0.3 * 0.6 * 4 * 0.07$
 $= 0.5 * x_s$

2L

- $x_s(pp \rightarrow H \rightarrow hh) * 2 * Br(h \rightarrow yy) * Br(h \rightarrow ww) * Br(w \rightarrow lv)^2 * Br(w \rightarrow jj) * eff *$
 $= 0.1 * x_s$

Expected bkg in signal region



About 2.5 bkg

Wh = 0.7

Tth = 0.1

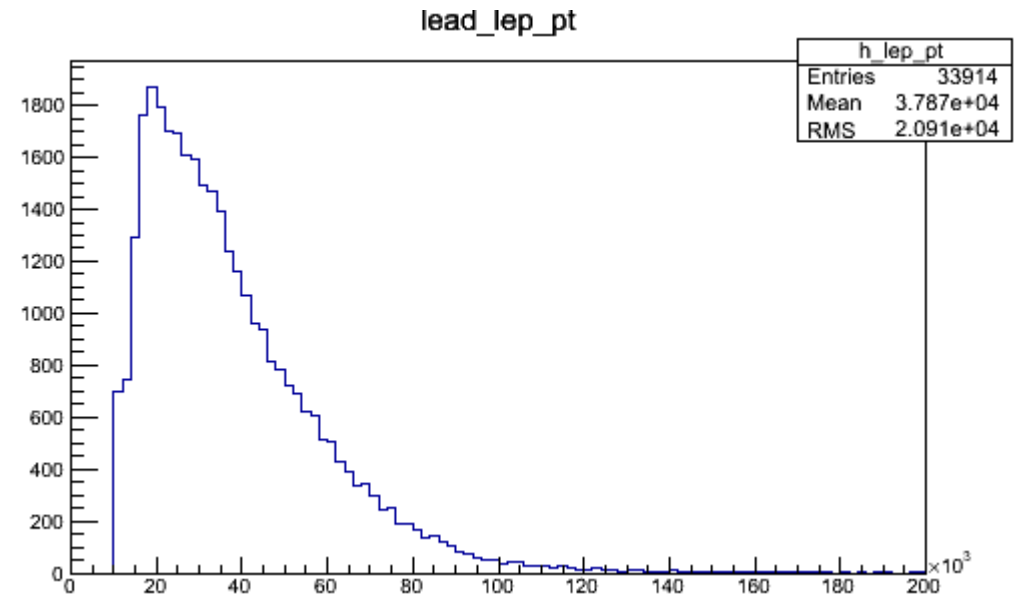
Others = 1.7.

- A tutorial of xAOD

<https://indico.cern.ch/event/313717/other-view?view=standard>

To do

- Try to use reverse ISO to estimate background ->
- Try to understand why the subleading lepton drops this much



backup