

# $t\bar{t}Z'$ Meeting

Manuel Fernando Sánchez Alarcón

# Conventions

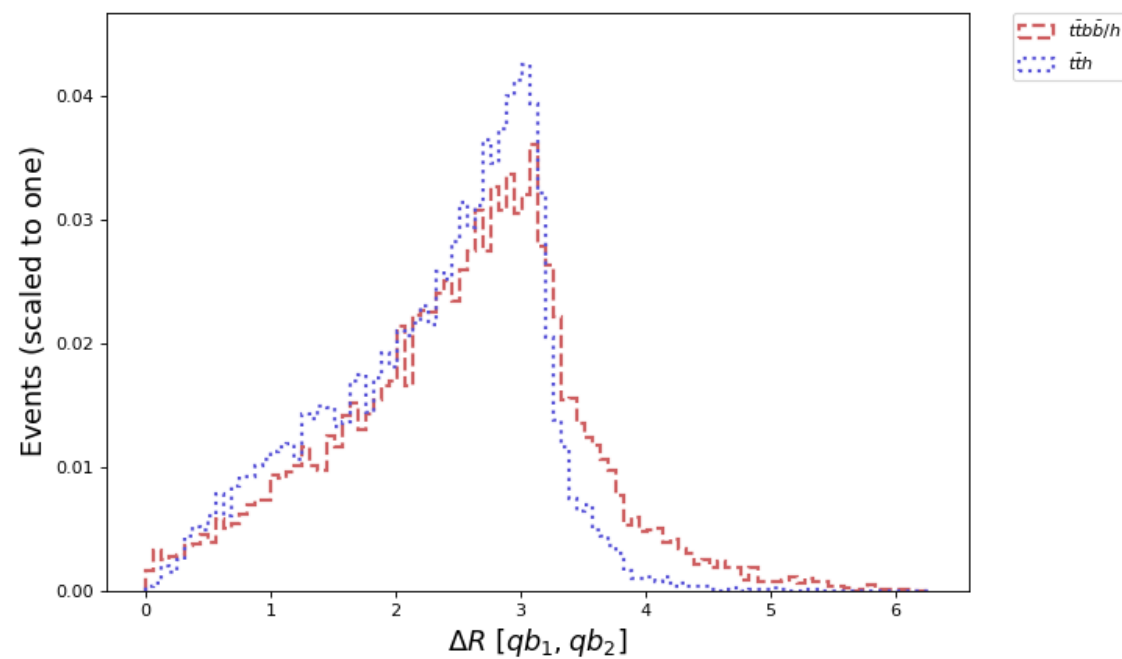
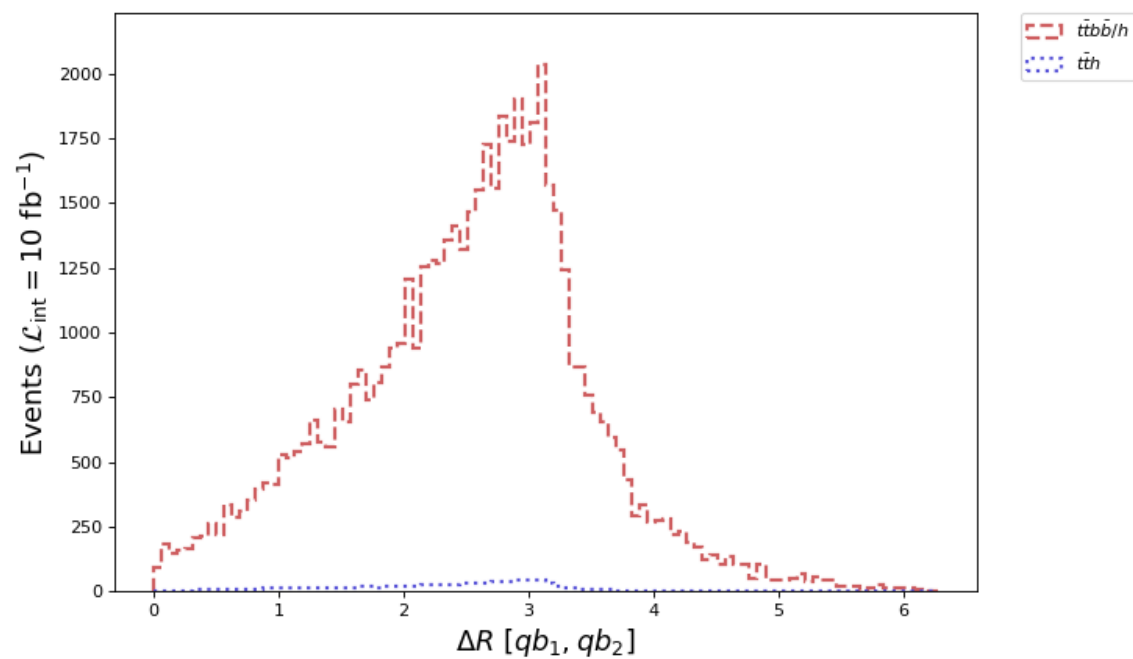
$l$       Leptons

$\nu_l$     Neutrinos

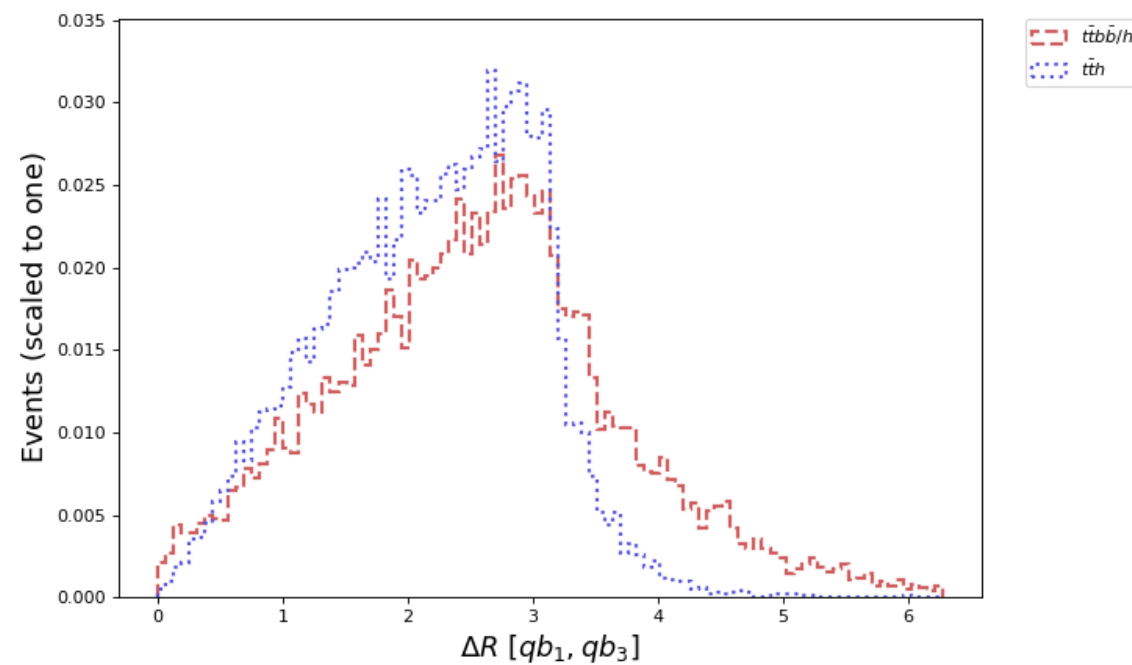
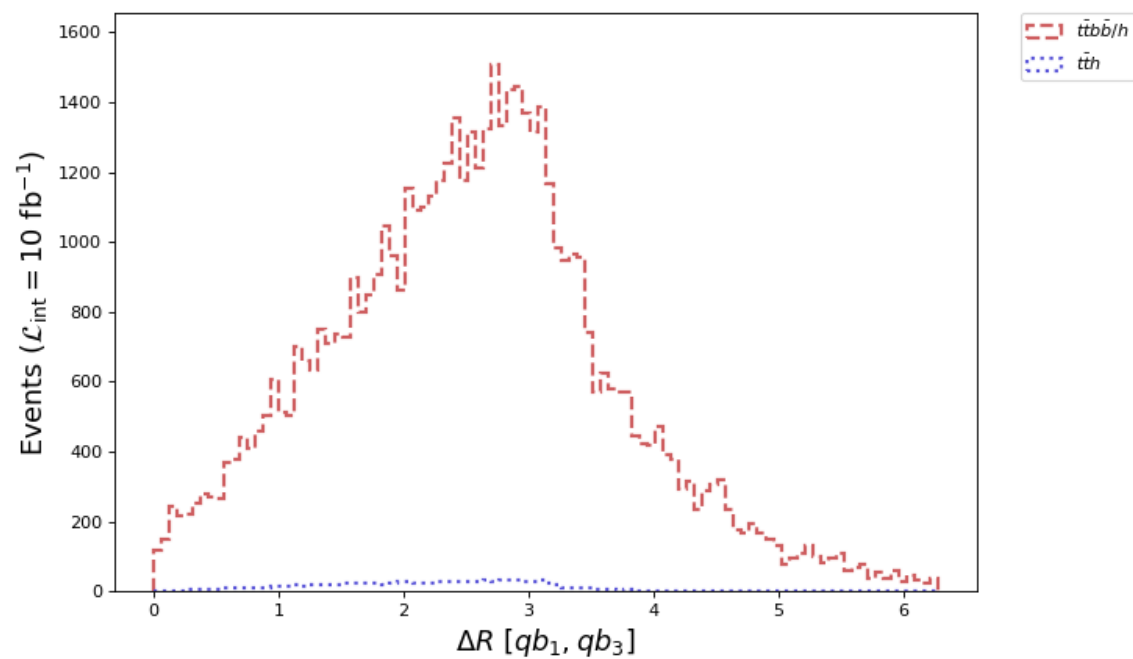
$b_i$     b quarks  $p_T(b_1) > p_T(b_2) > \dots$

$j_i$     Jets  $p_T(j_1) > p_T(j_2)$

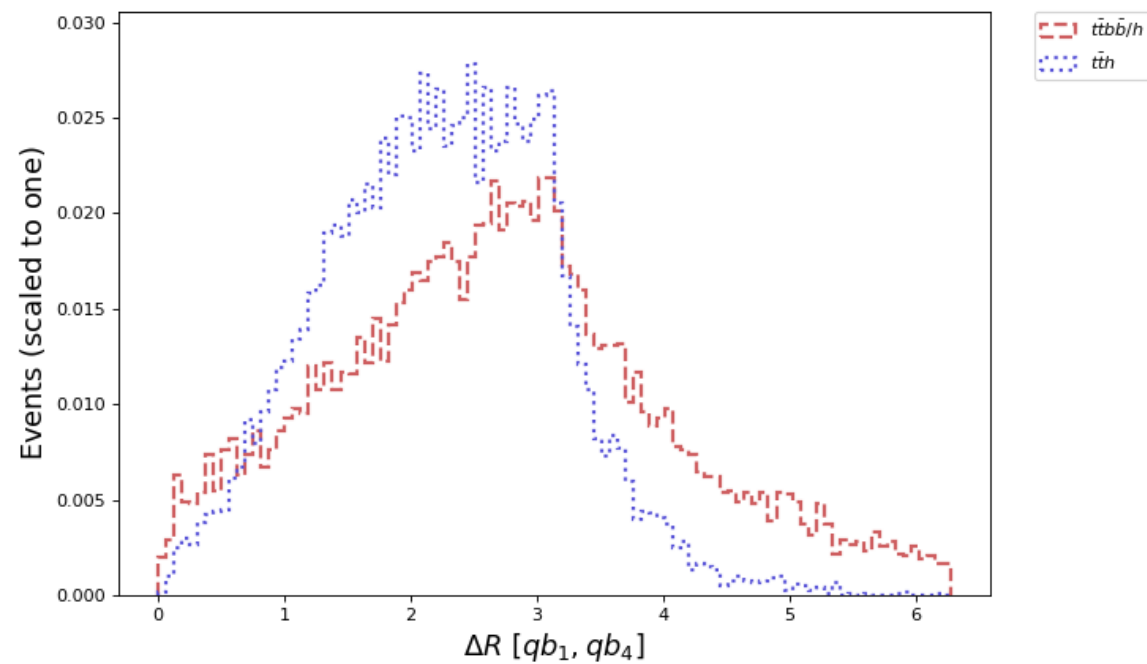
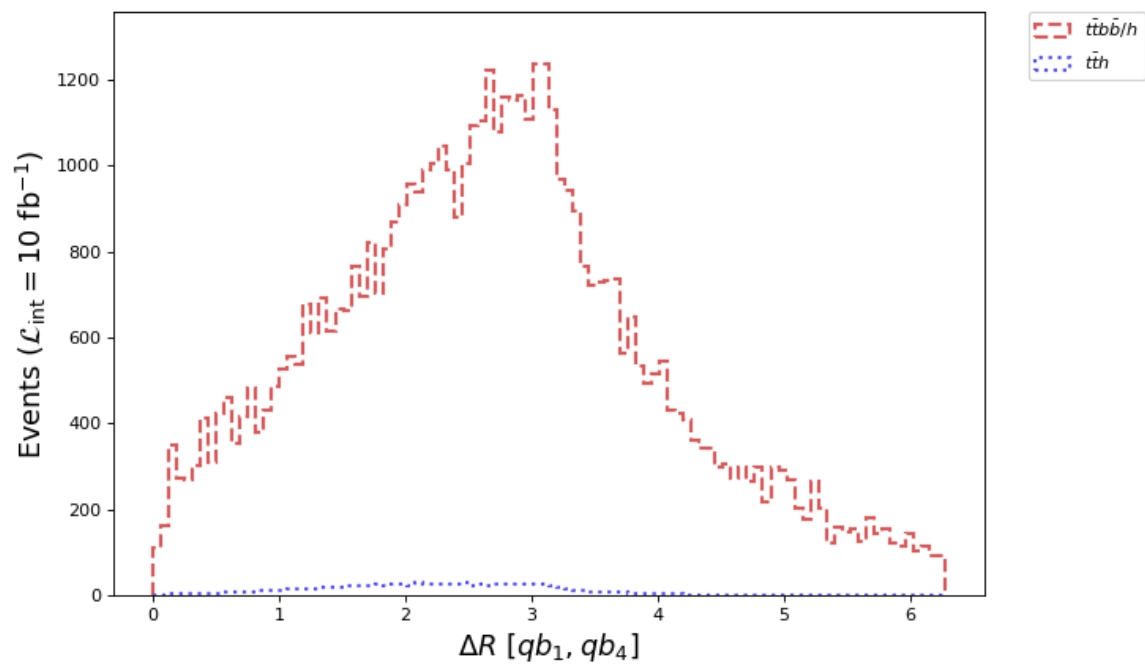
$$\Delta R(b_1, b_2)$$



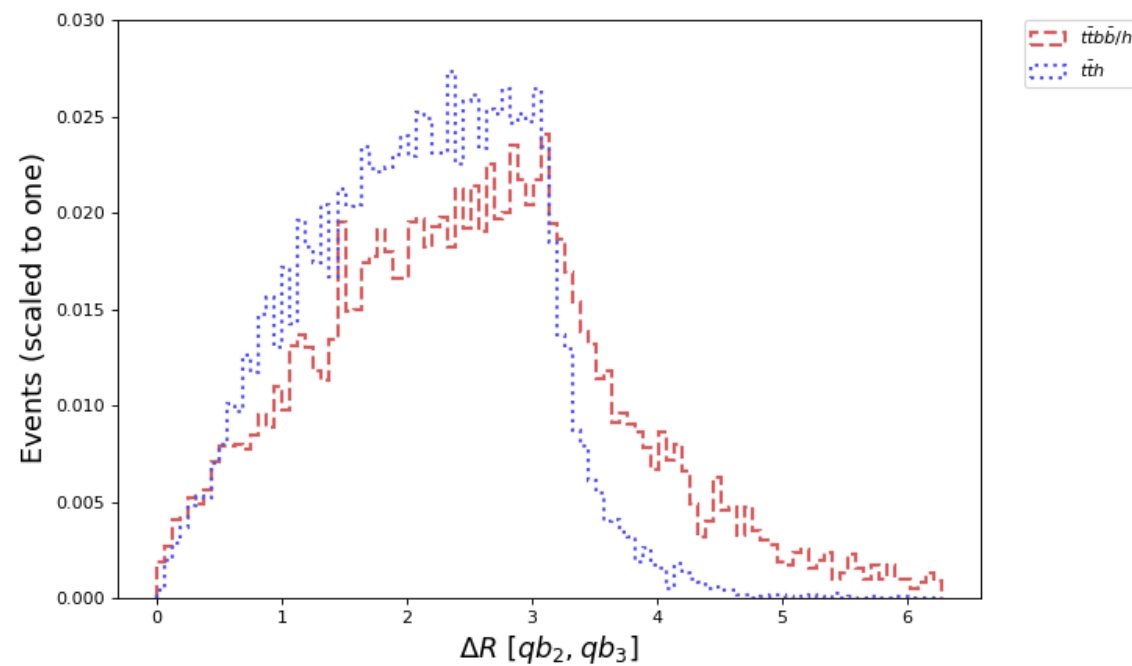
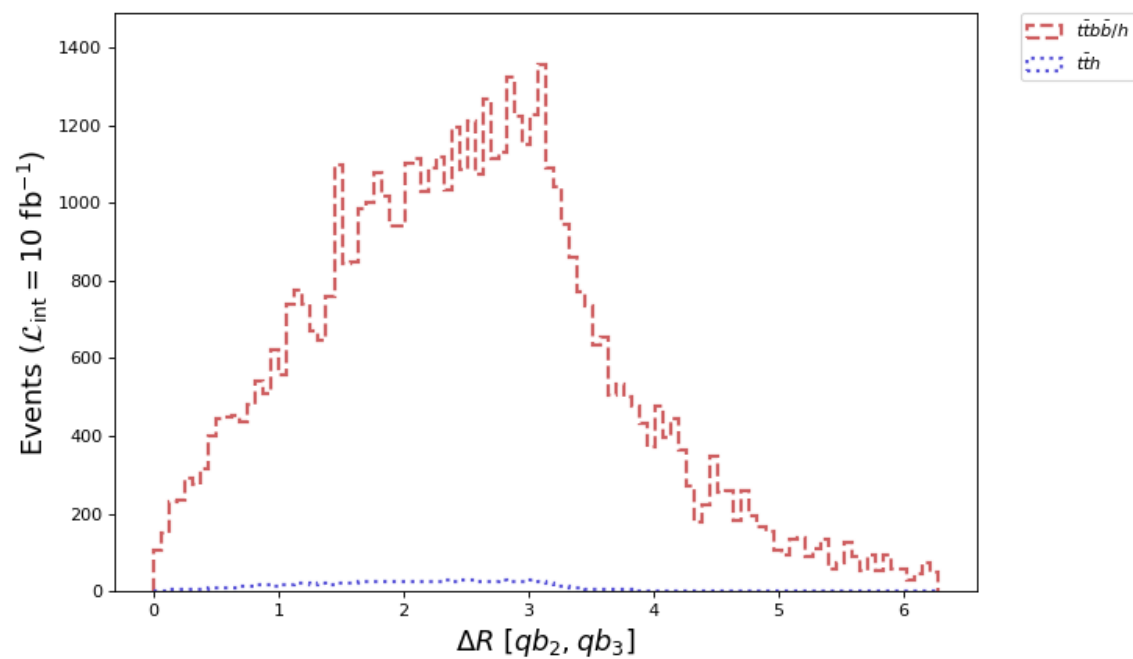
$$\Delta R(b_1, b_3)$$



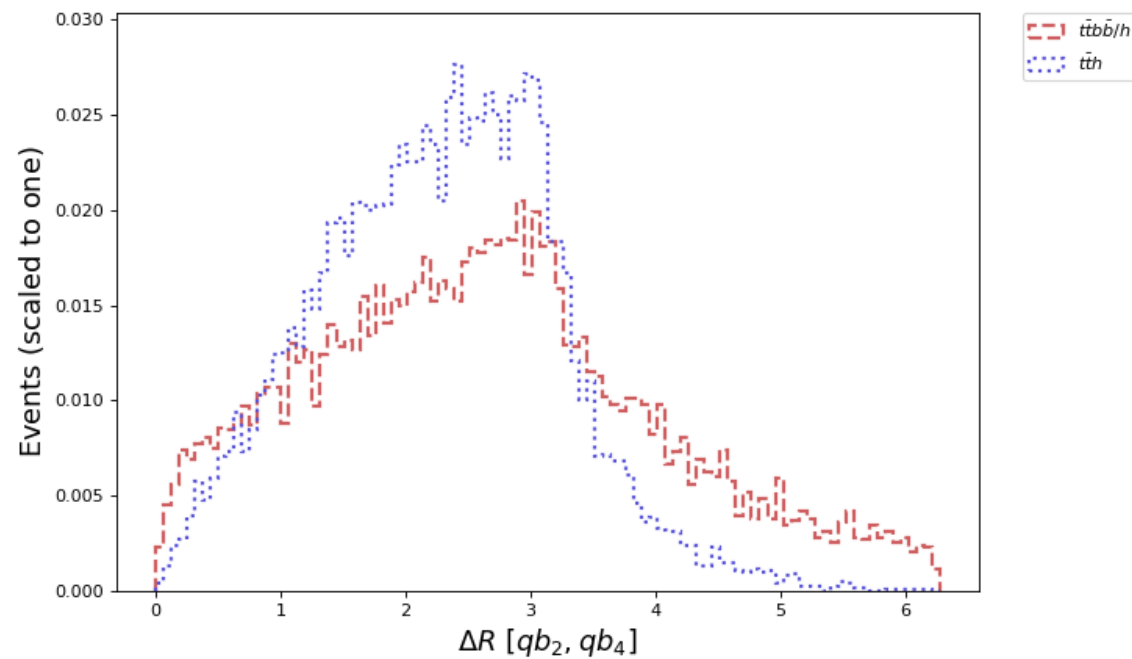
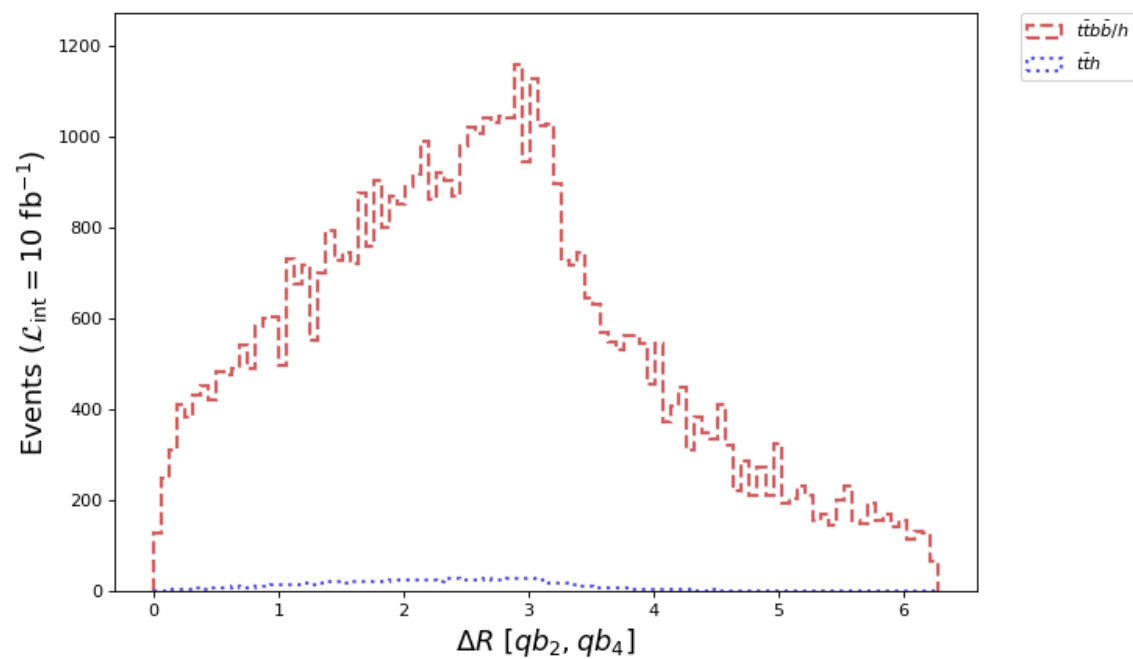
$$\Delta R(b_1, b_4)$$



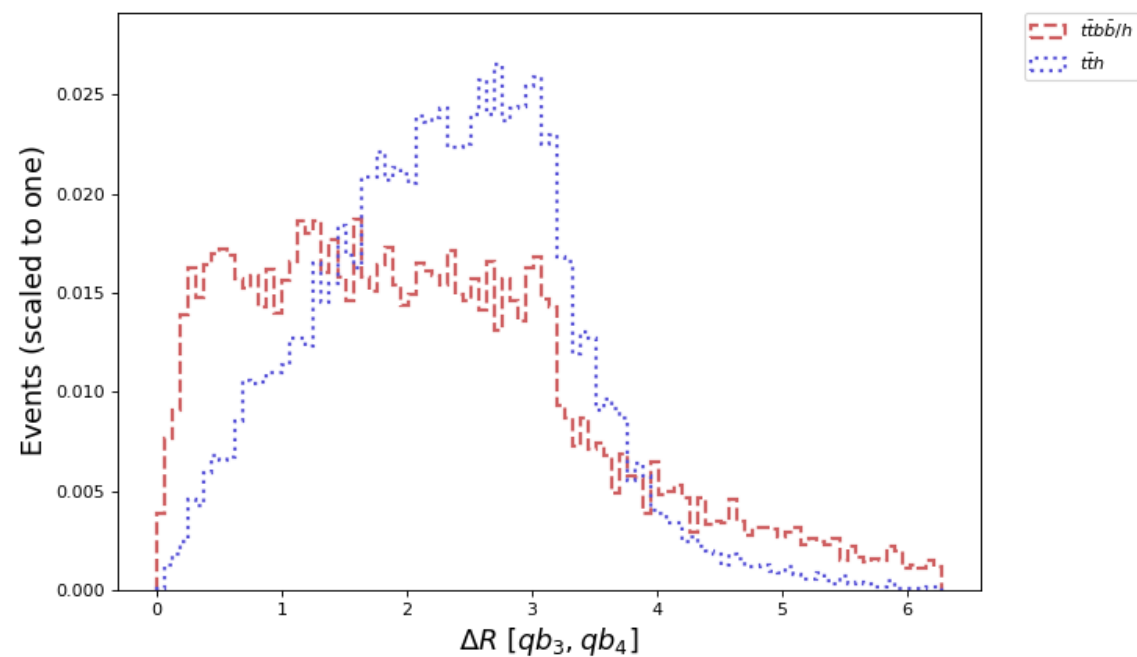
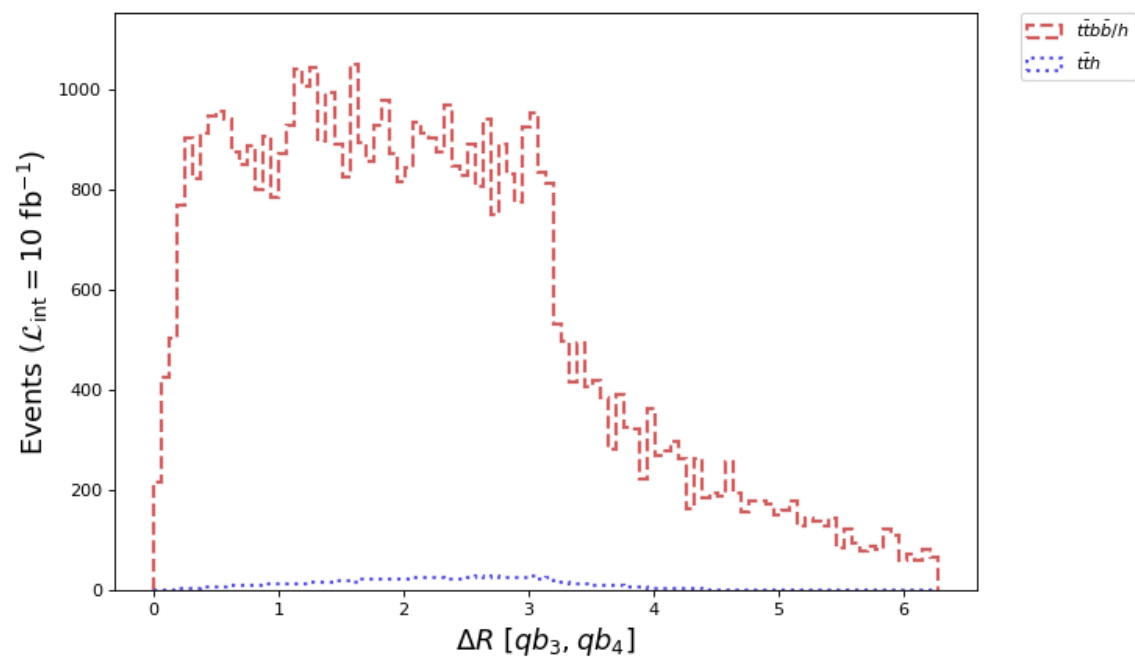
$$\Delta R(b_2, b_3)$$



$$\Delta R(b_2, b_4)$$

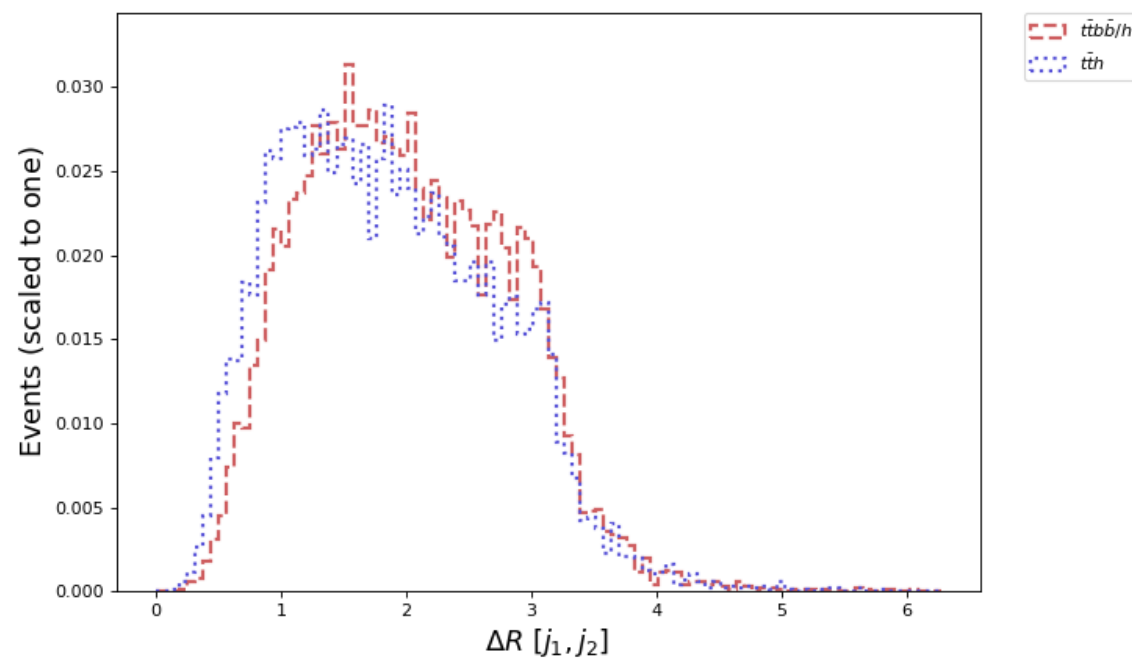
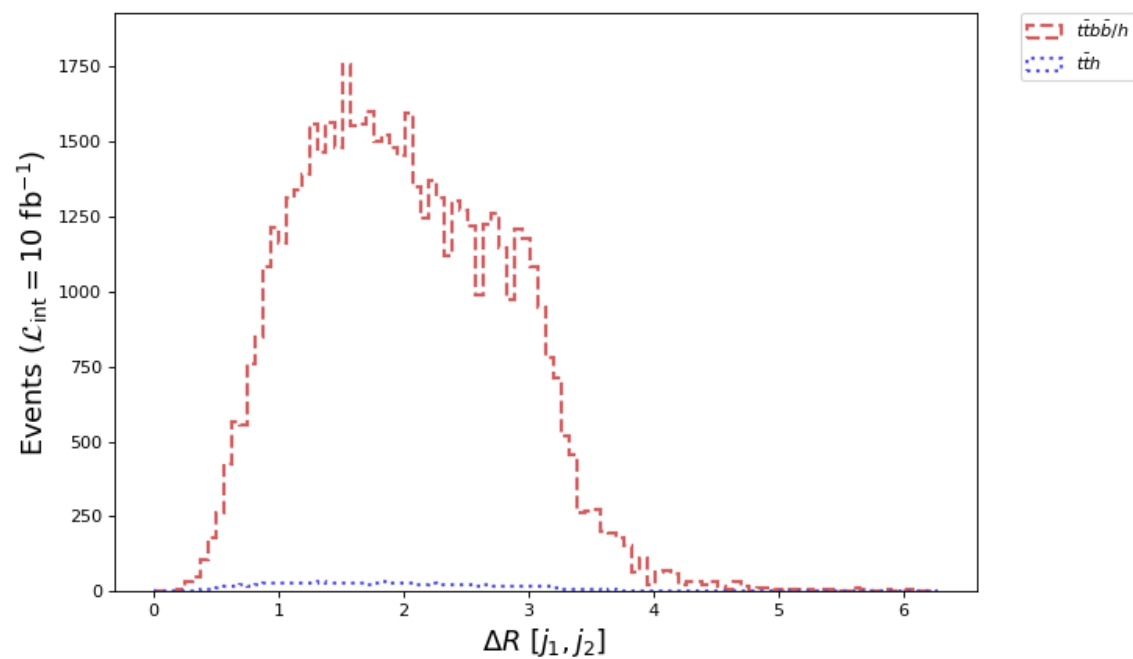


$$\Delta R(b_3, b_4)$$

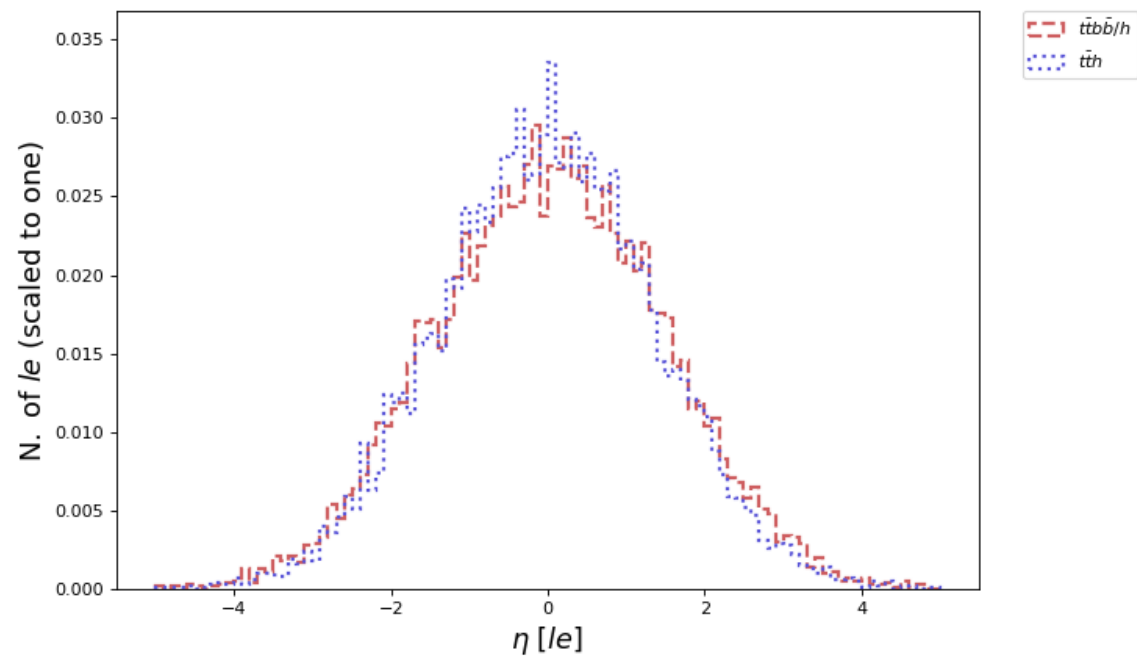
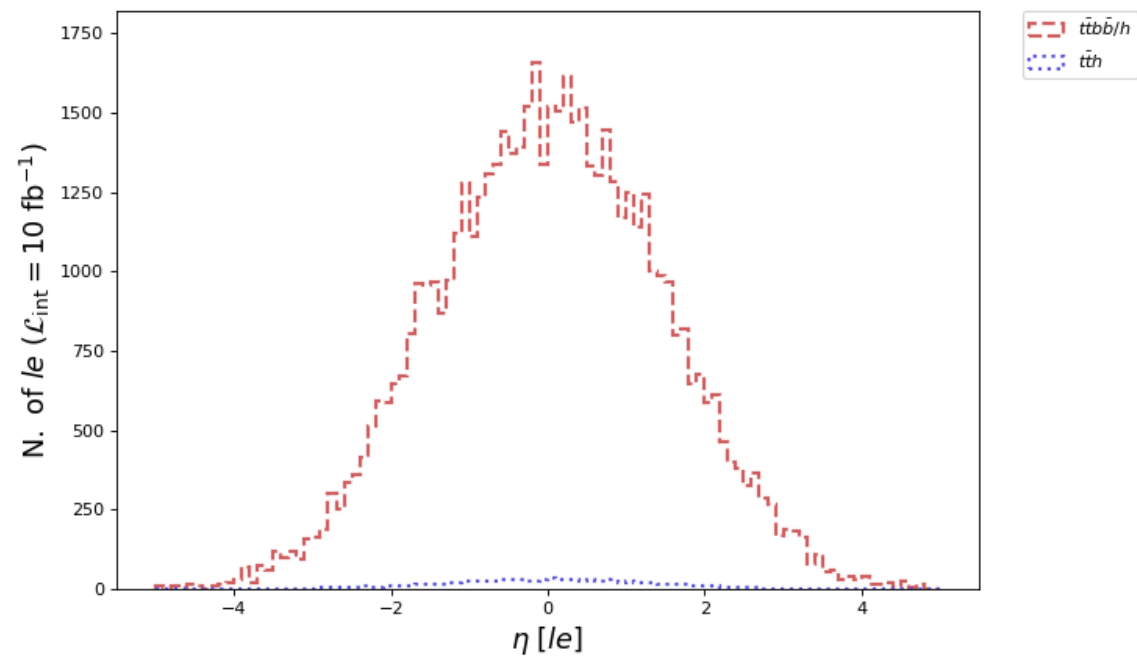




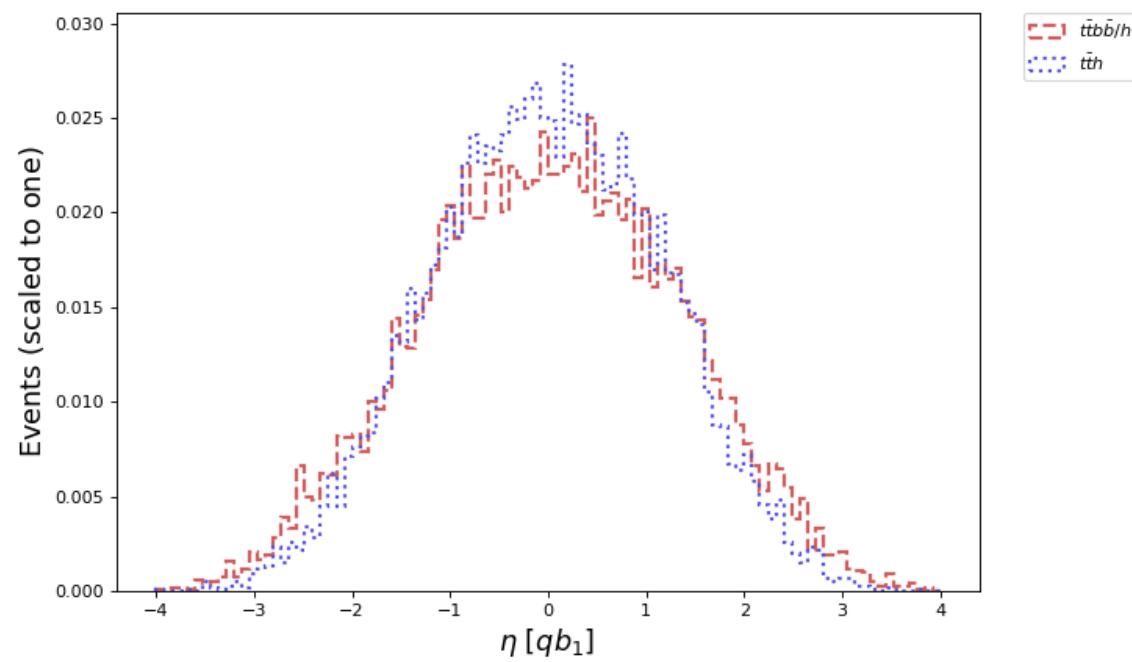
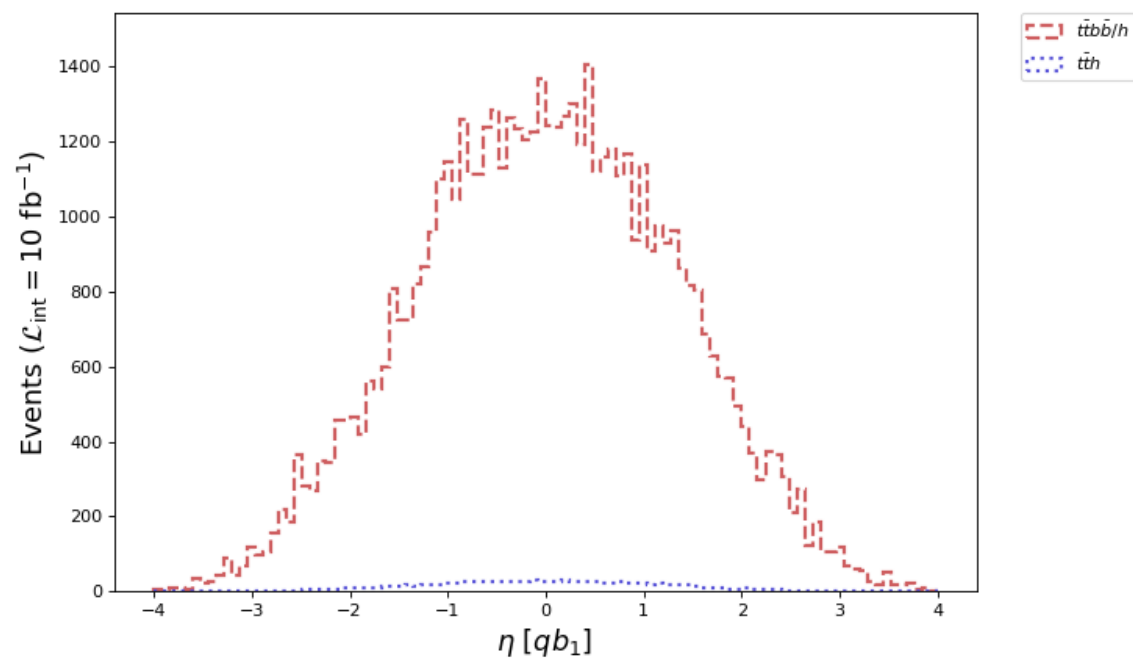
$$\Delta R(j_1, j_2)$$



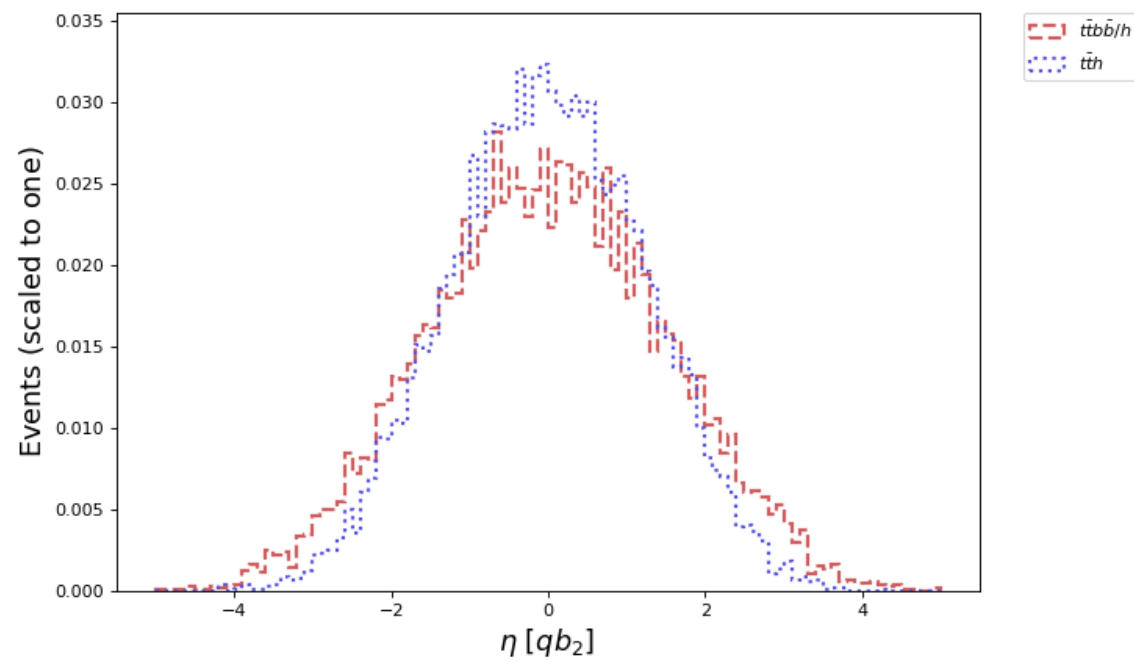
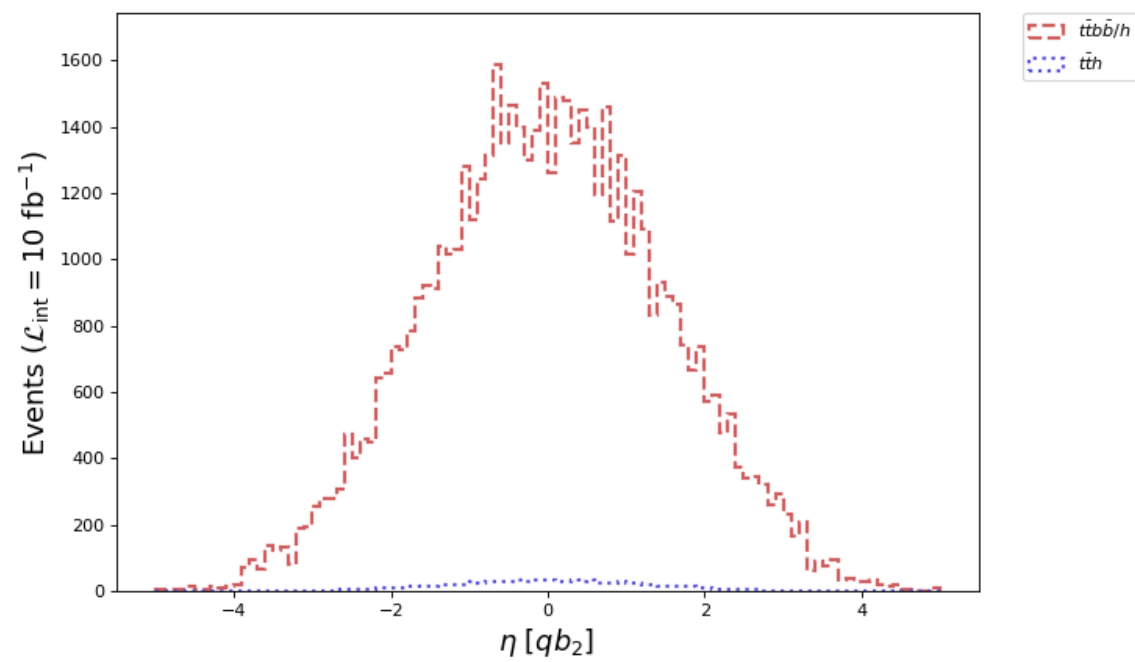
$$\eta(l)$$



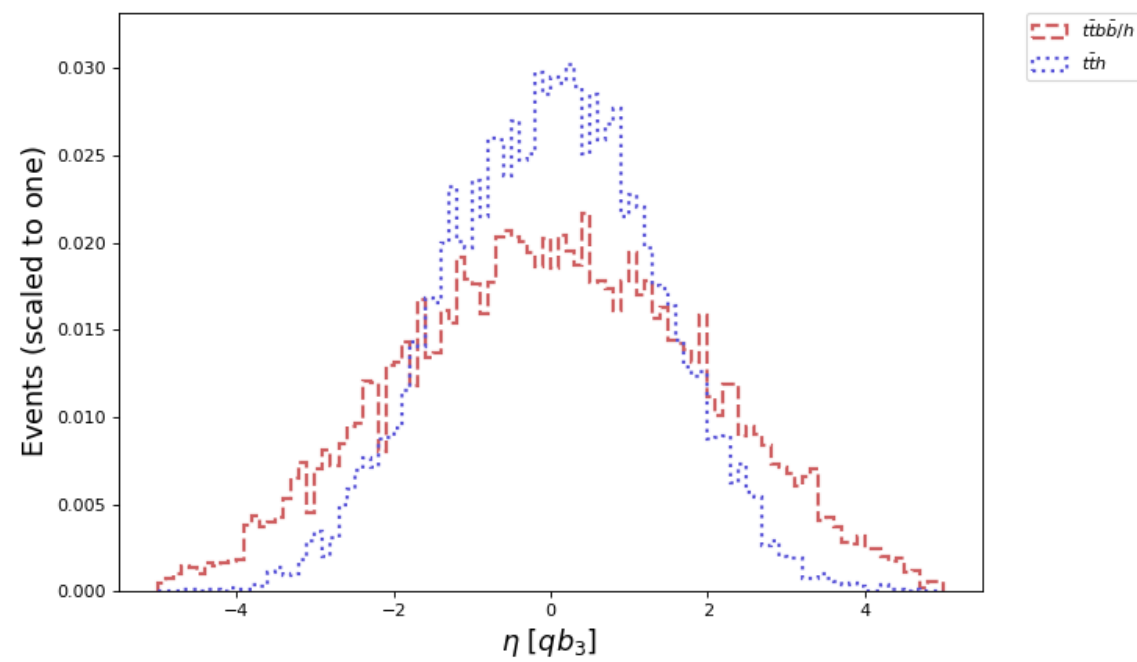
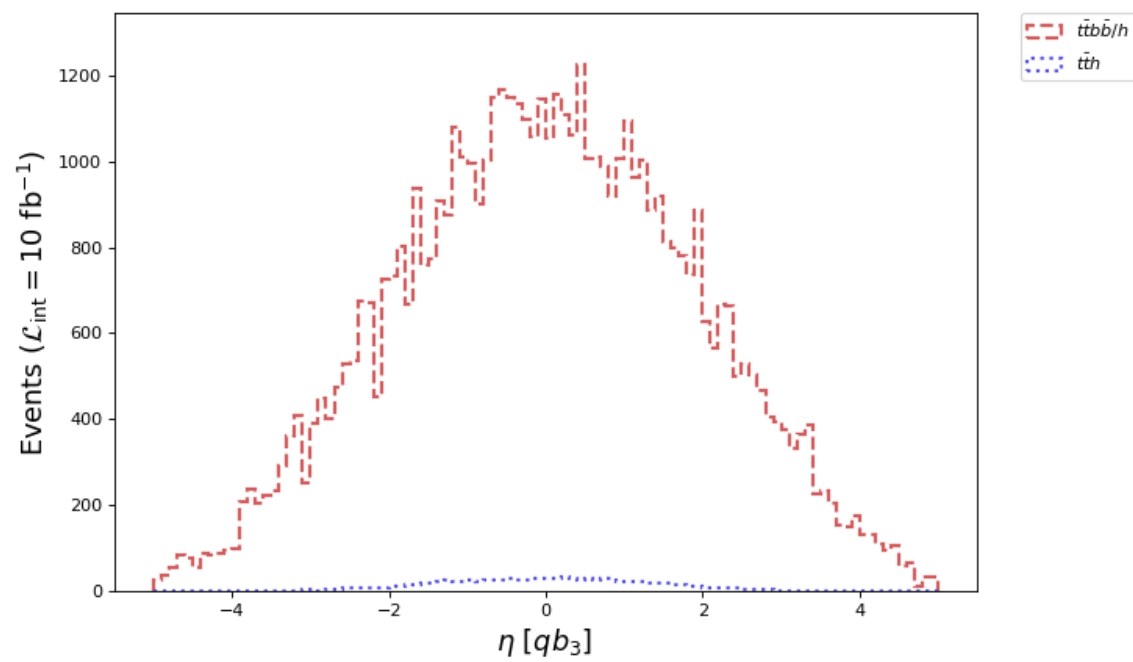
$$\eta(b_1)$$



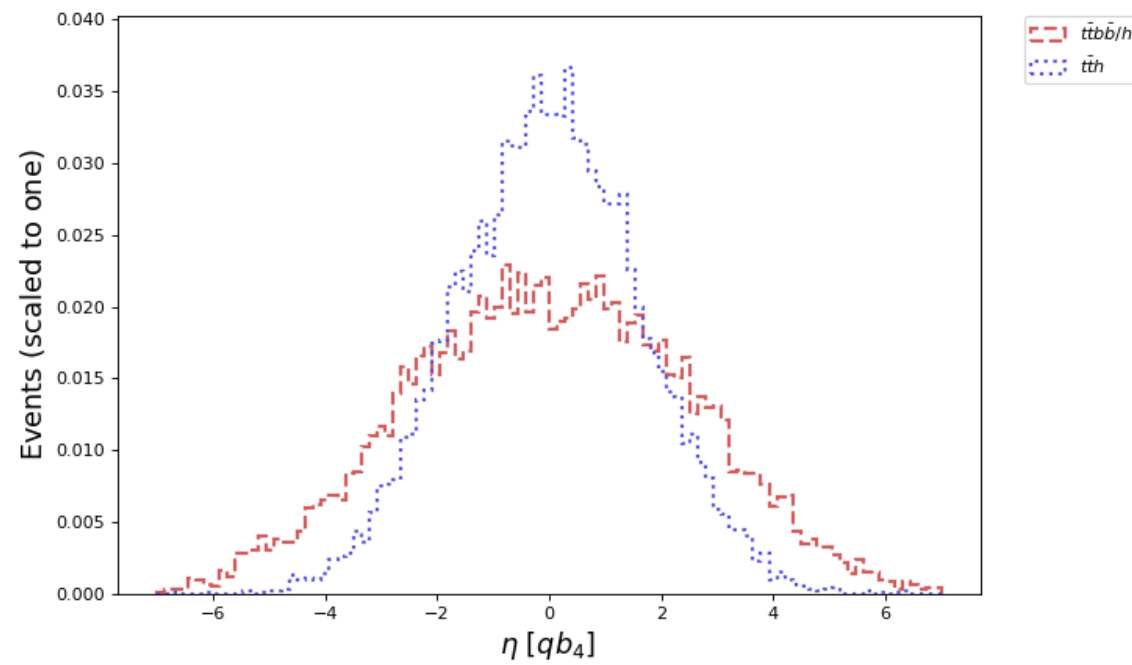
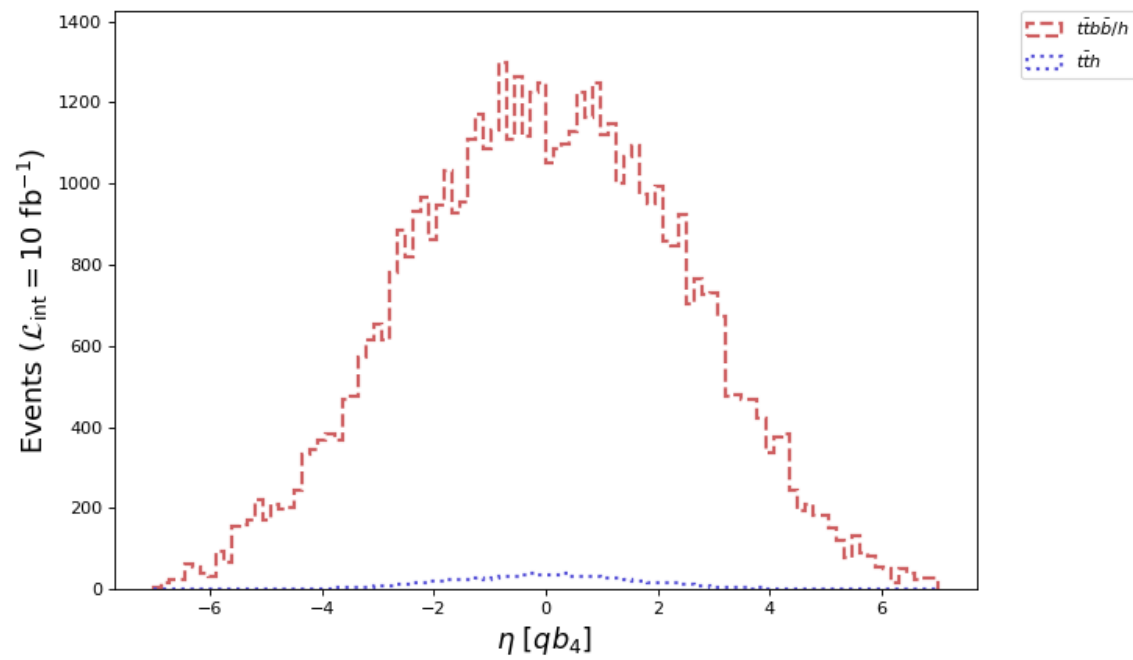
$$\eta(b_2)$$



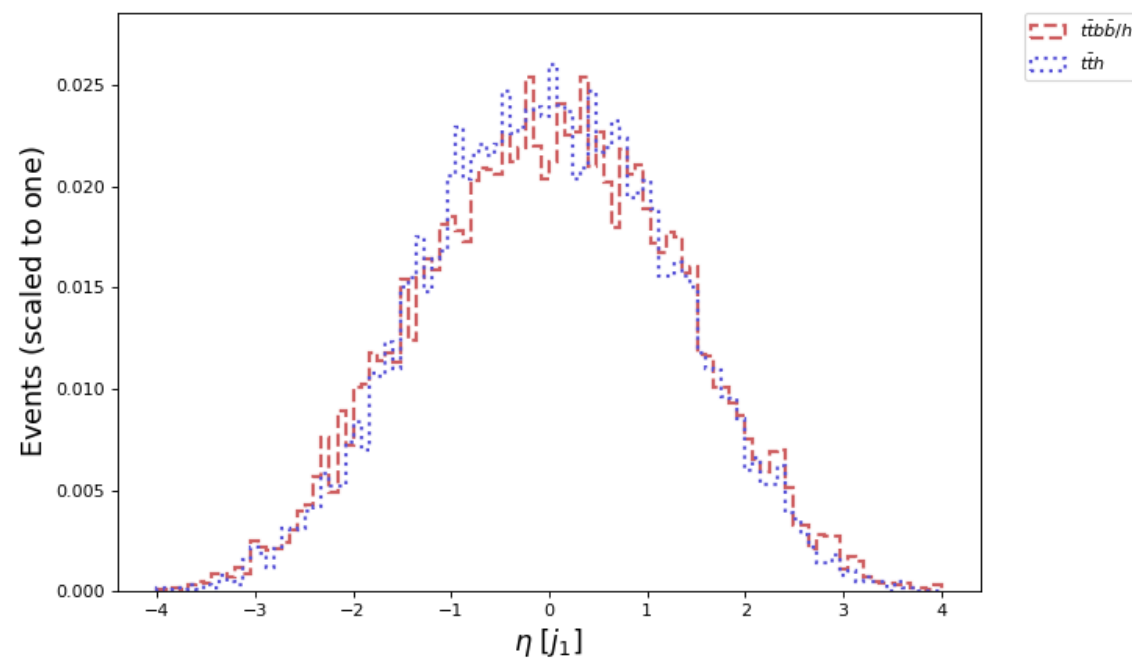
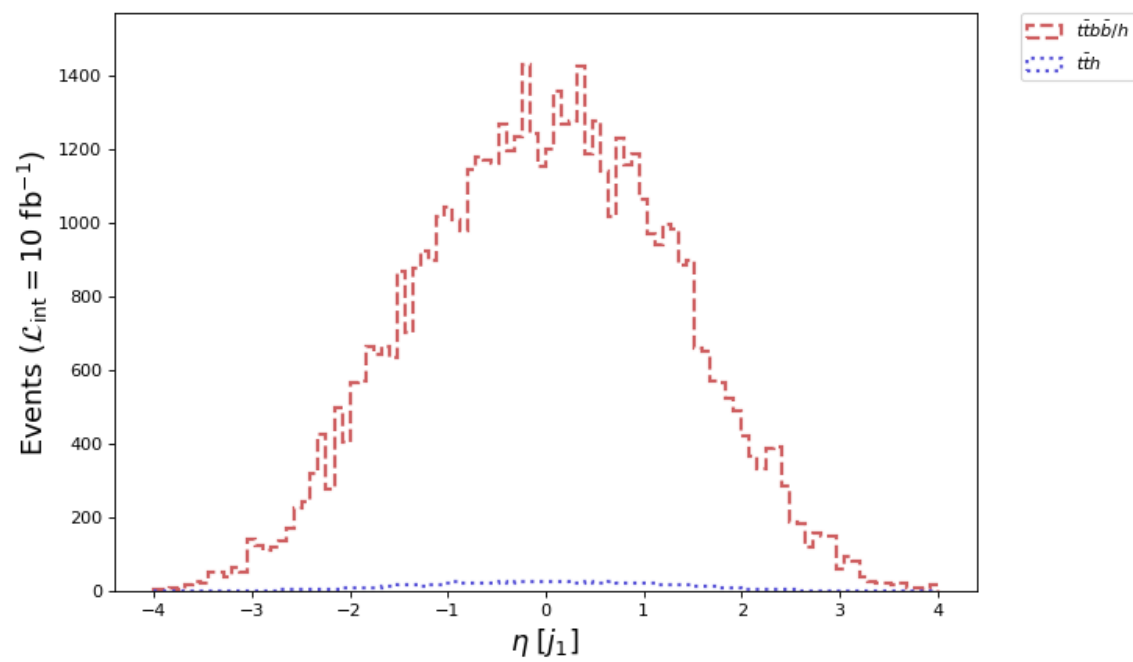
$$\eta(b_3)$$



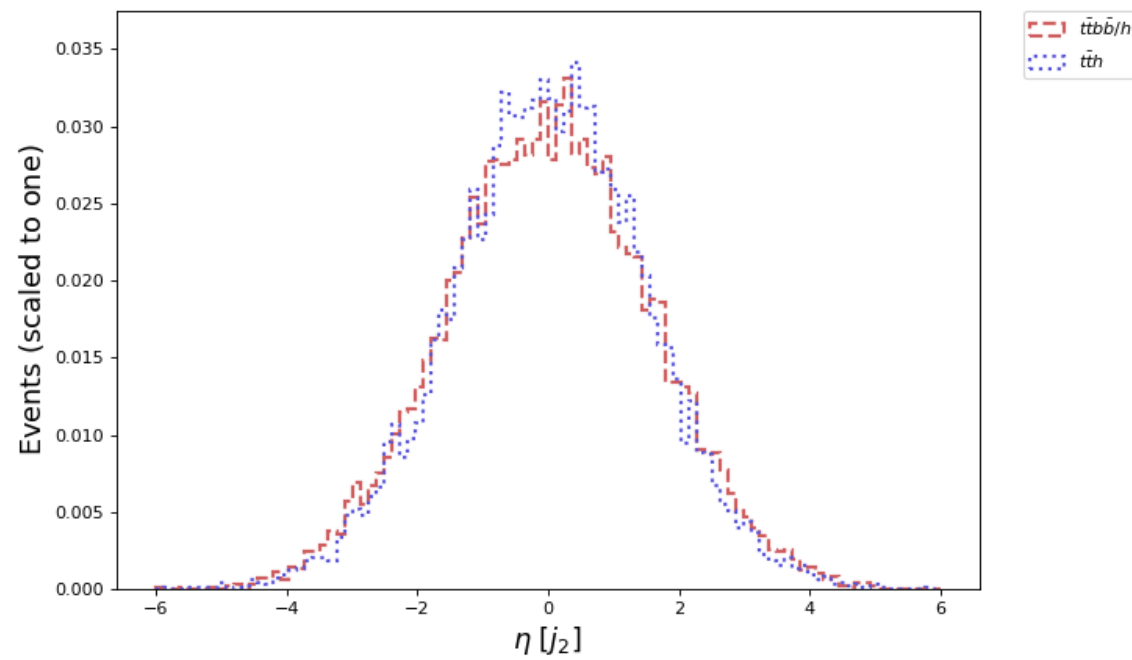
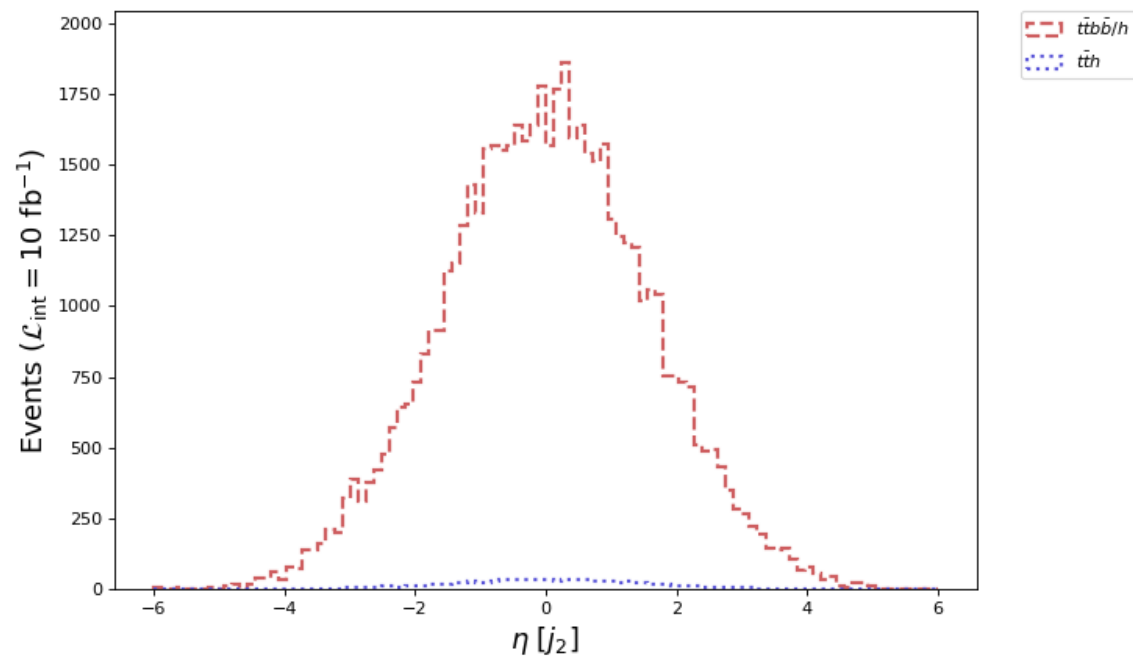
$$\eta(b_4)$$



$$\eta(j_1)$$

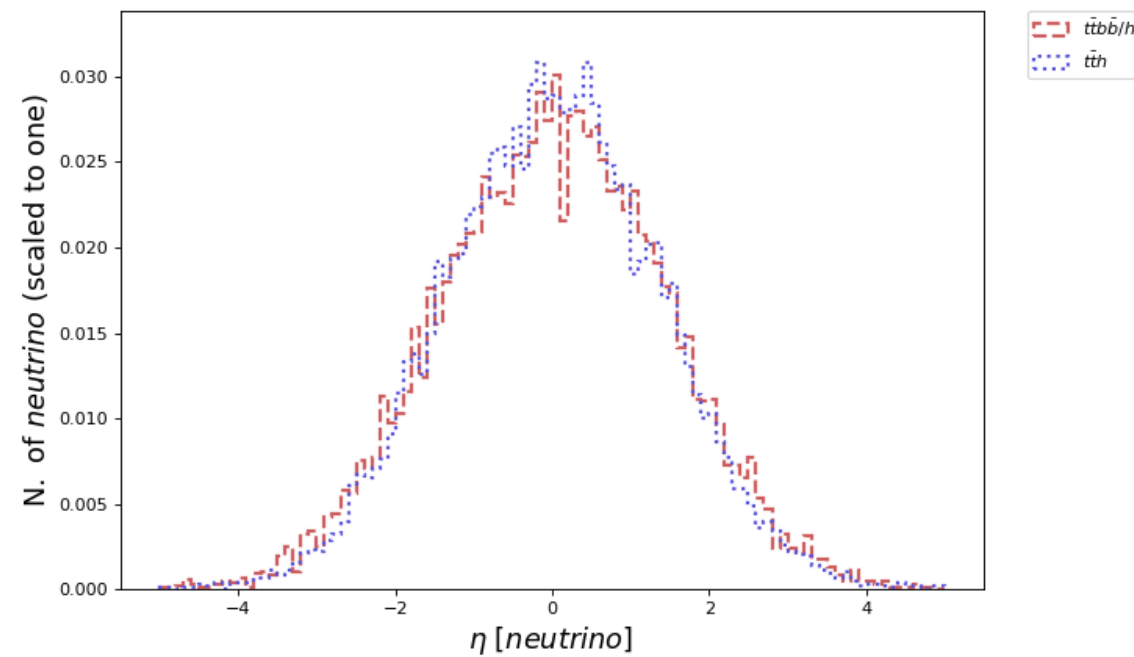
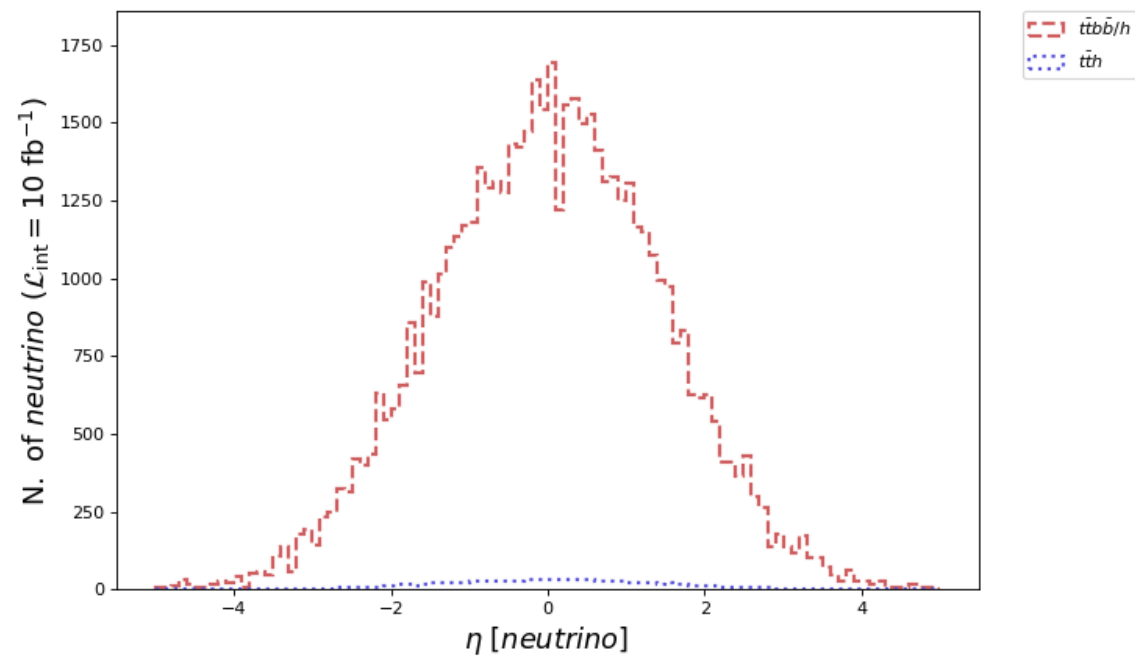


$$\eta(j_2)$$

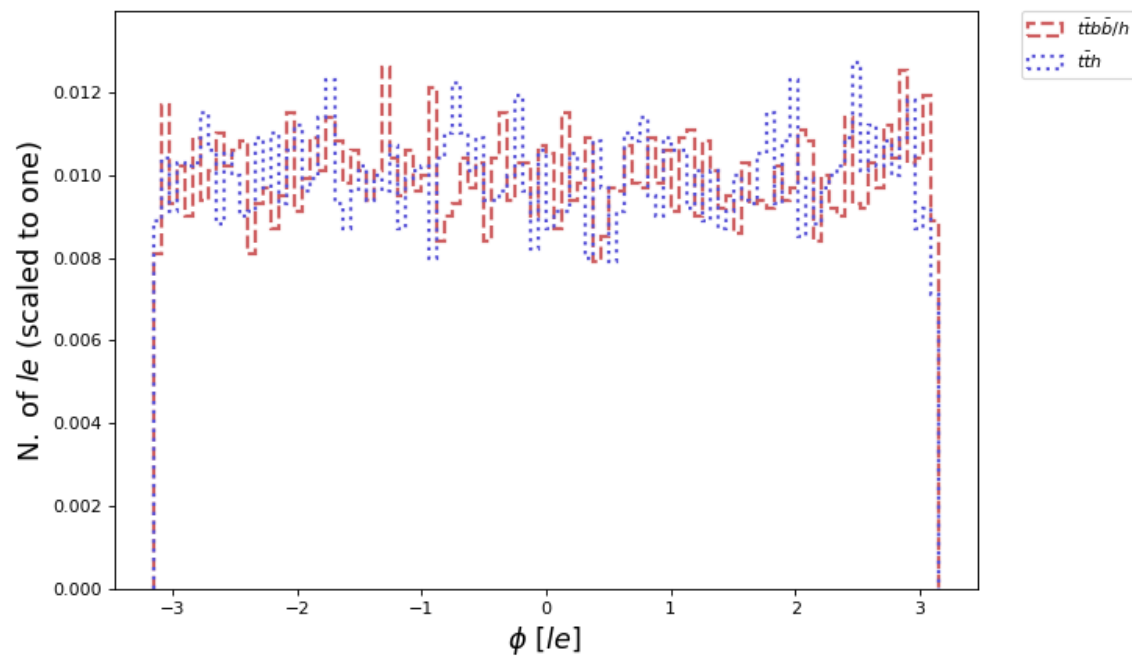
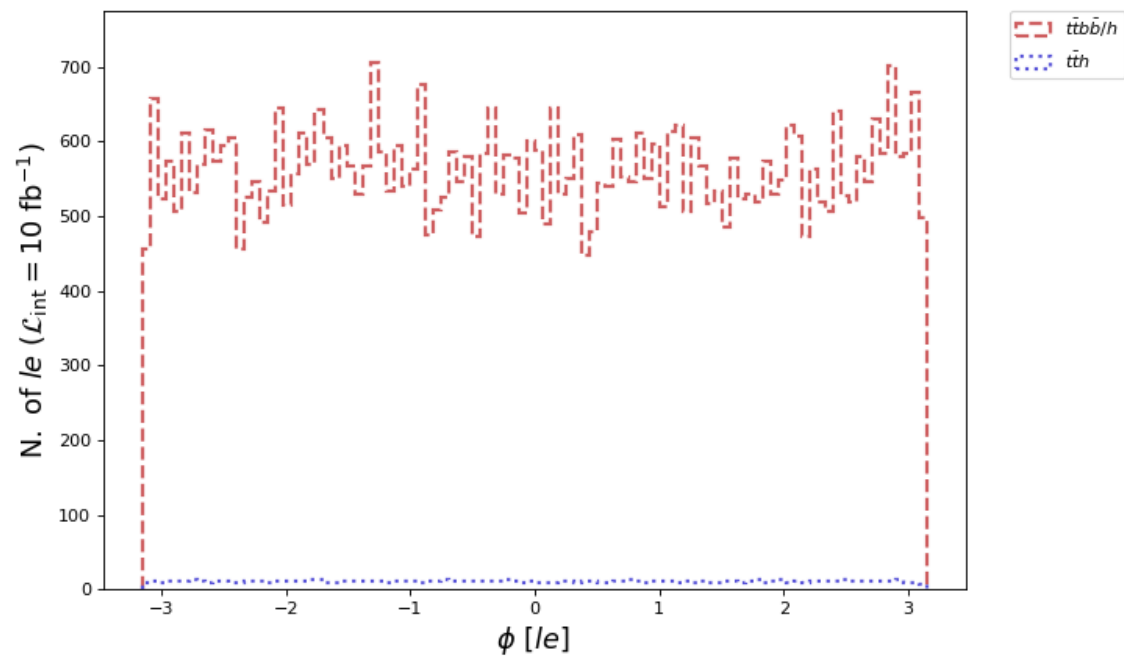




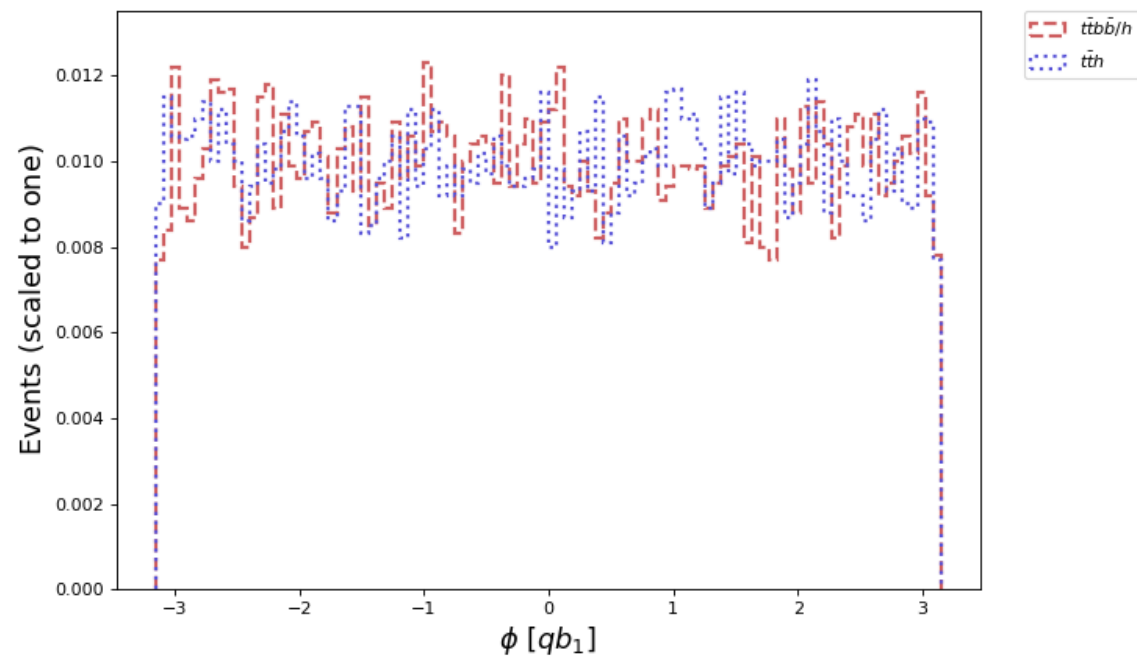
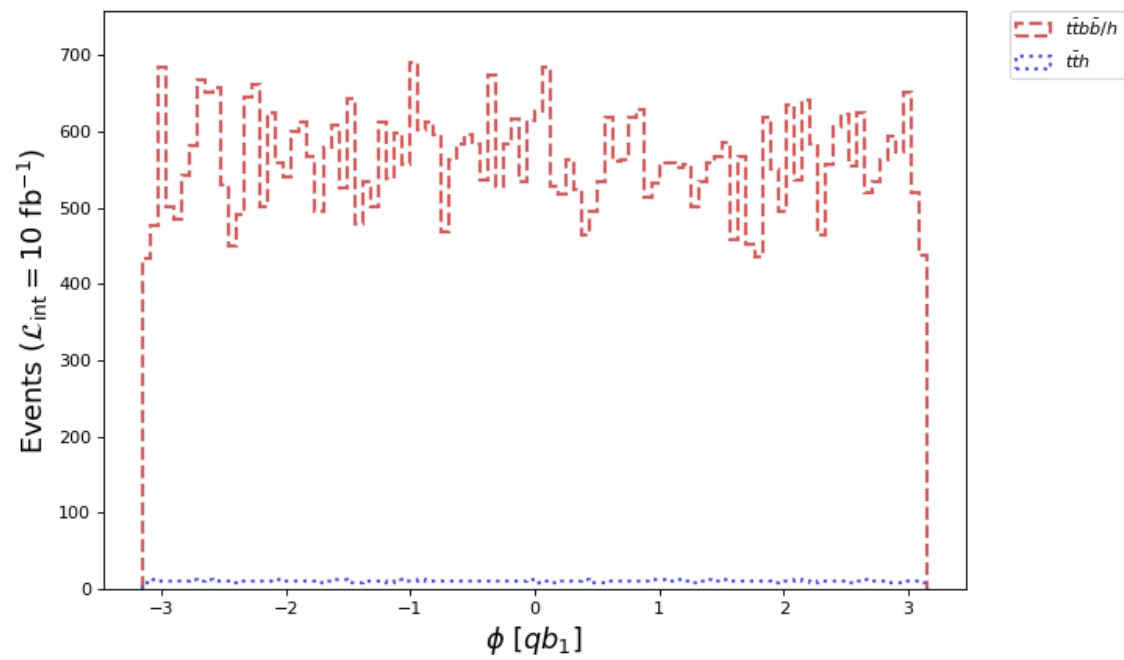
$$\eta(\nu_l)$$



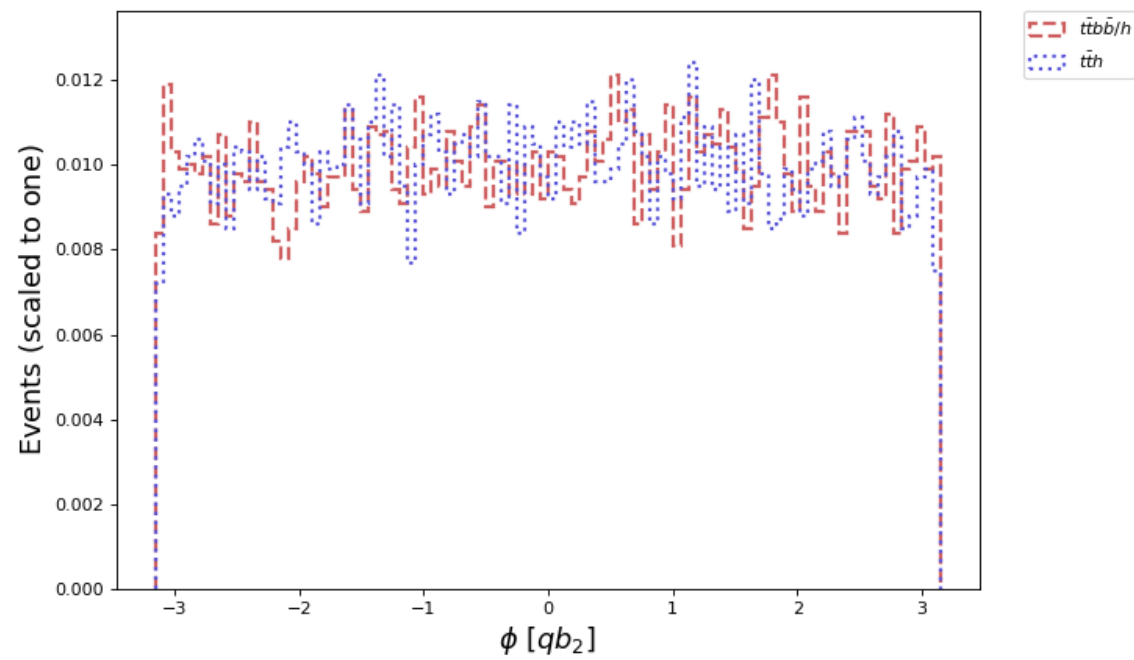
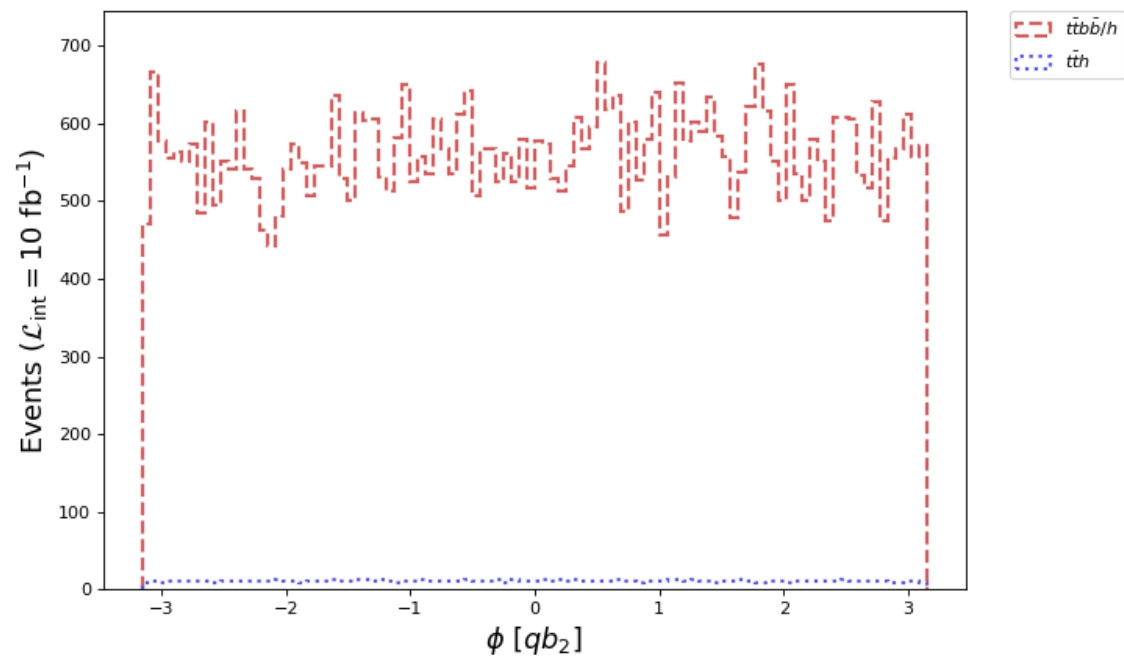
$$\phi(l)$$



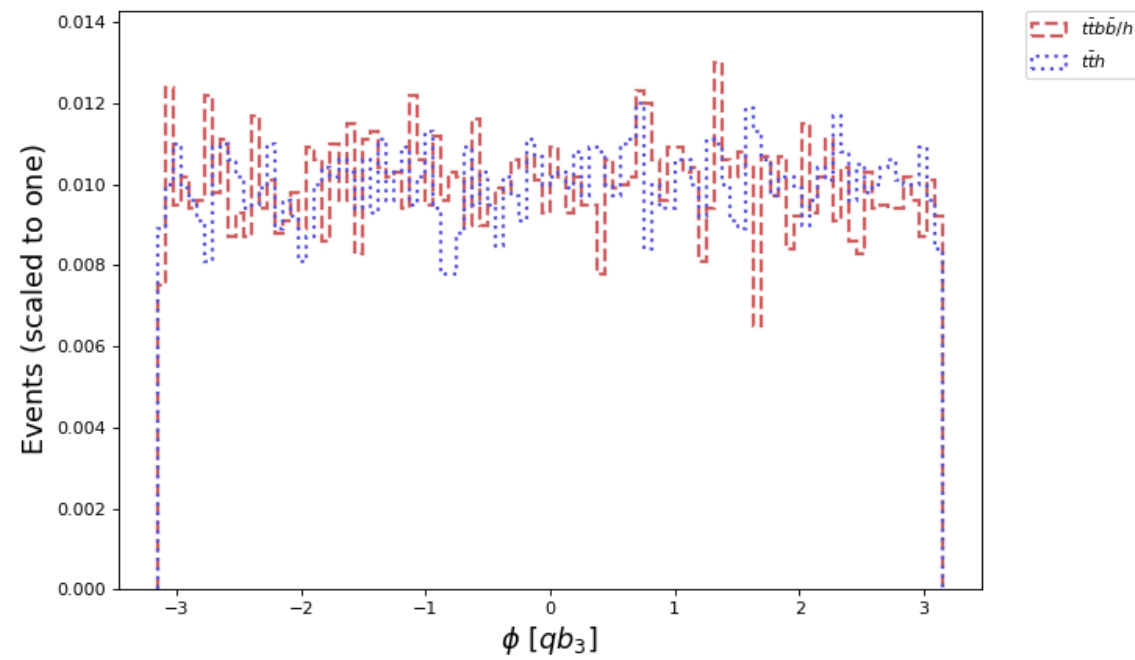
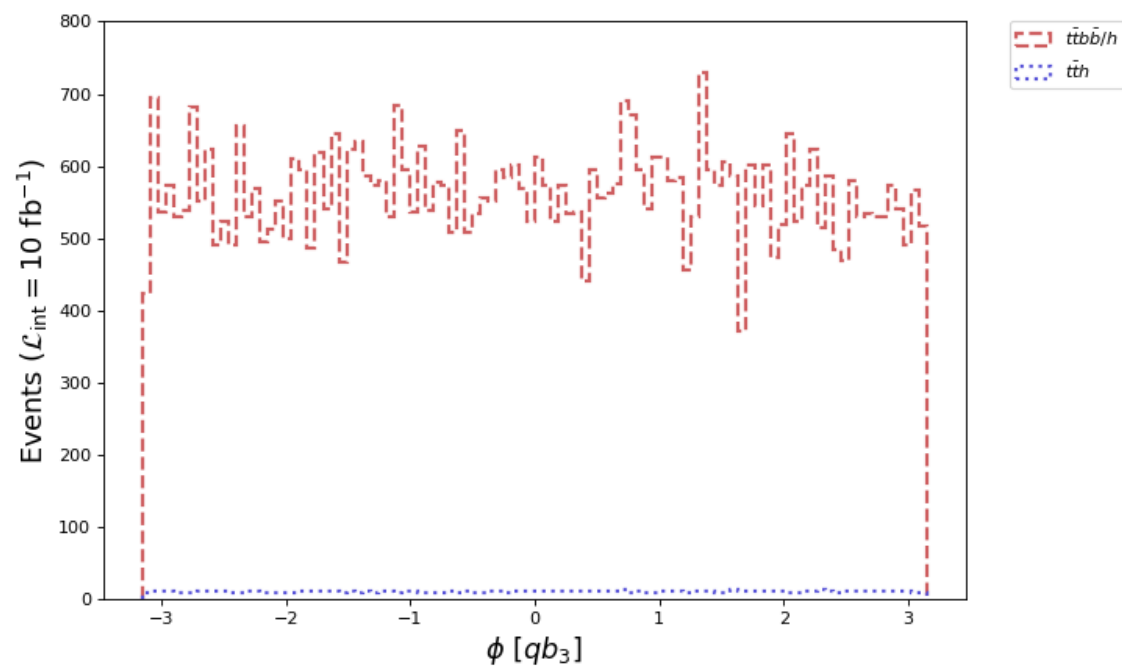
$$\phi(b_1)$$



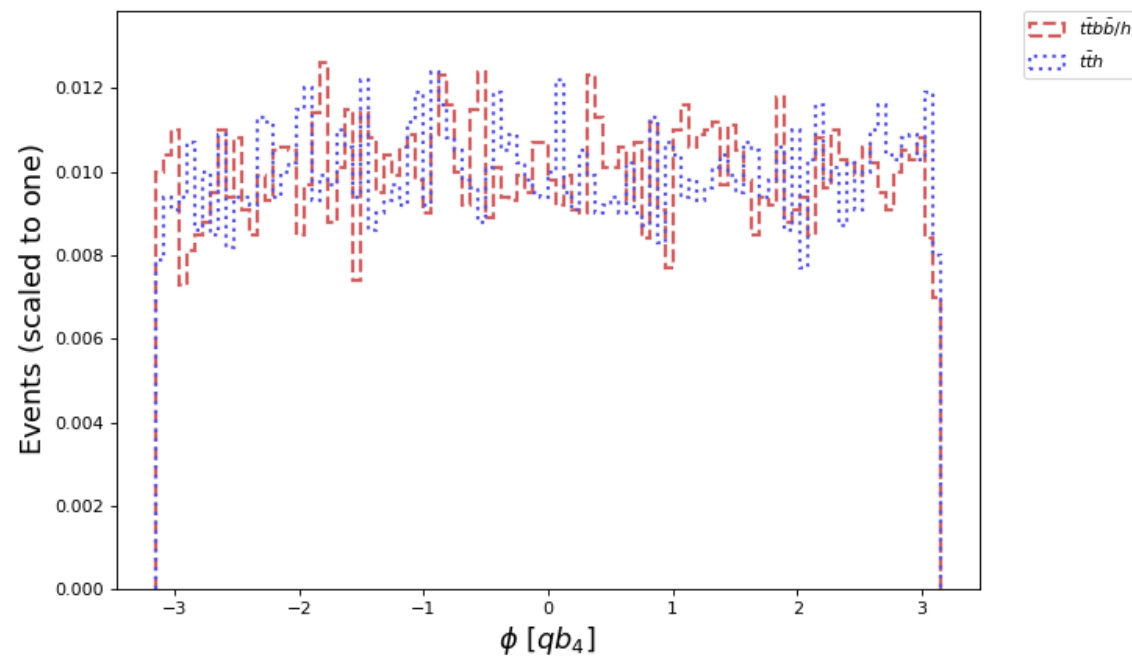
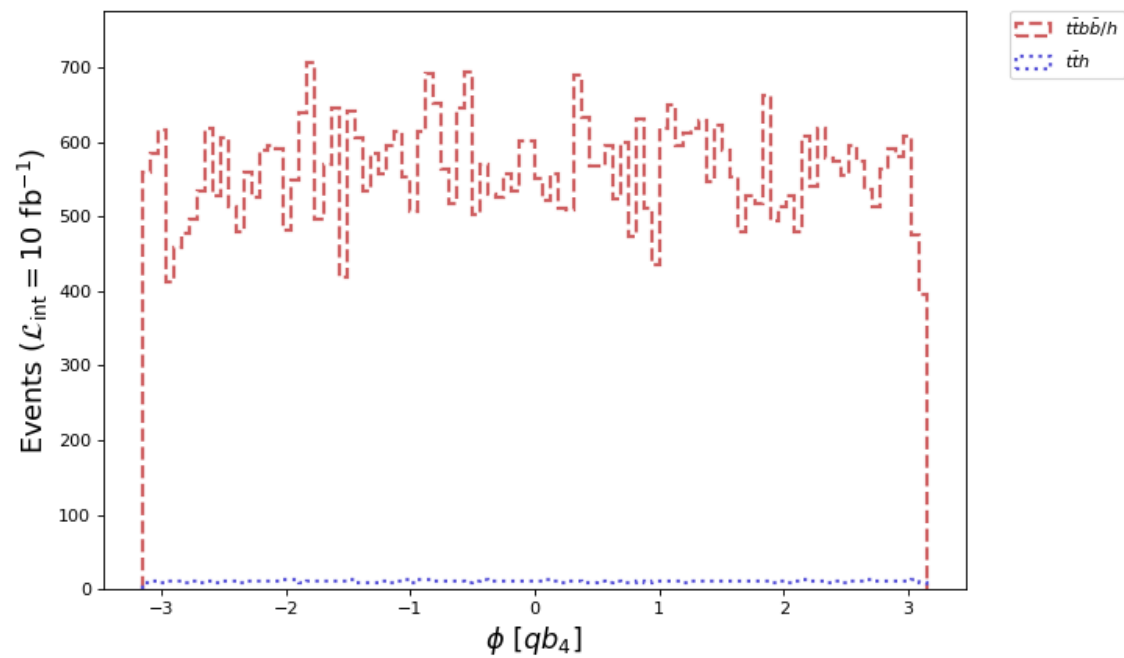
$$\phi(b_2)$$



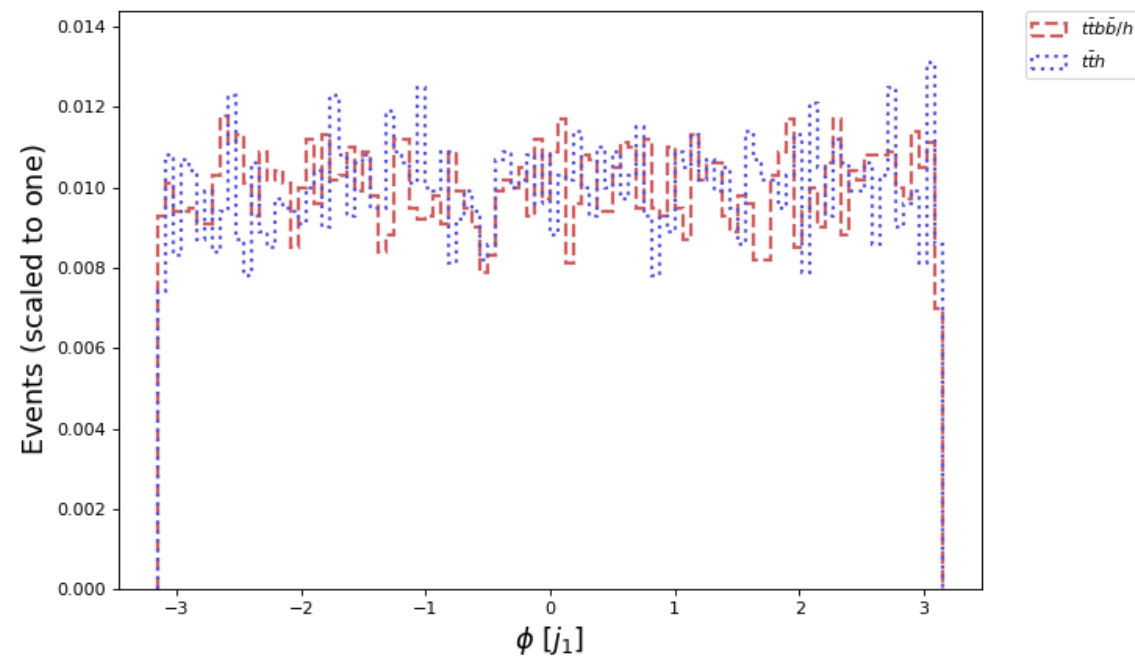
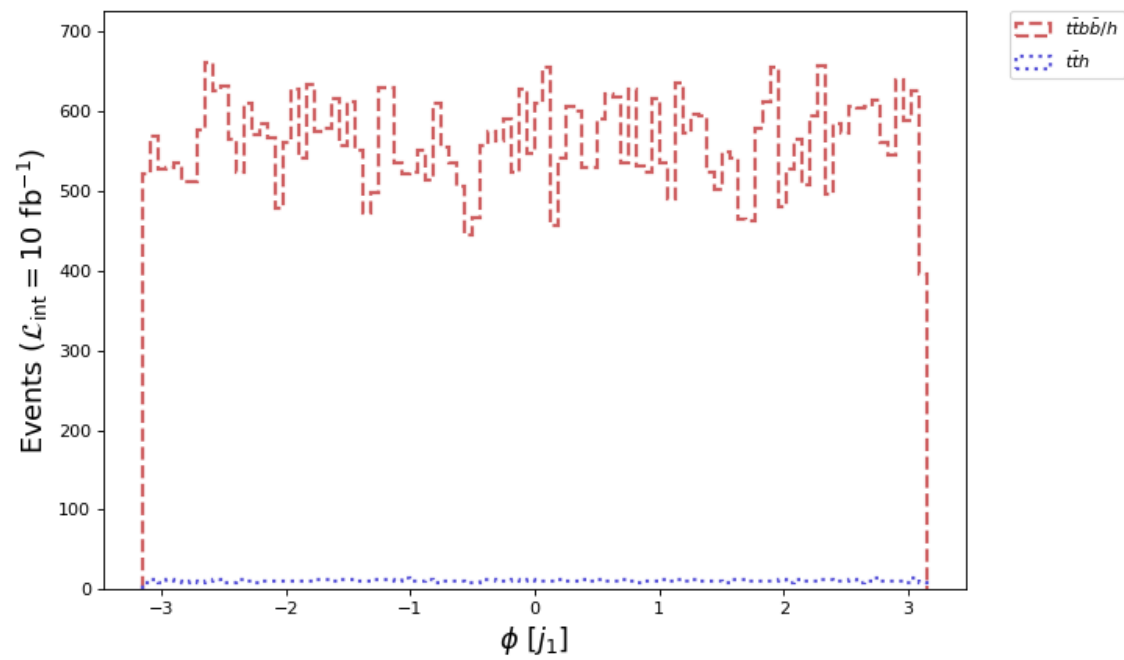
$$\phi(b_3)$$



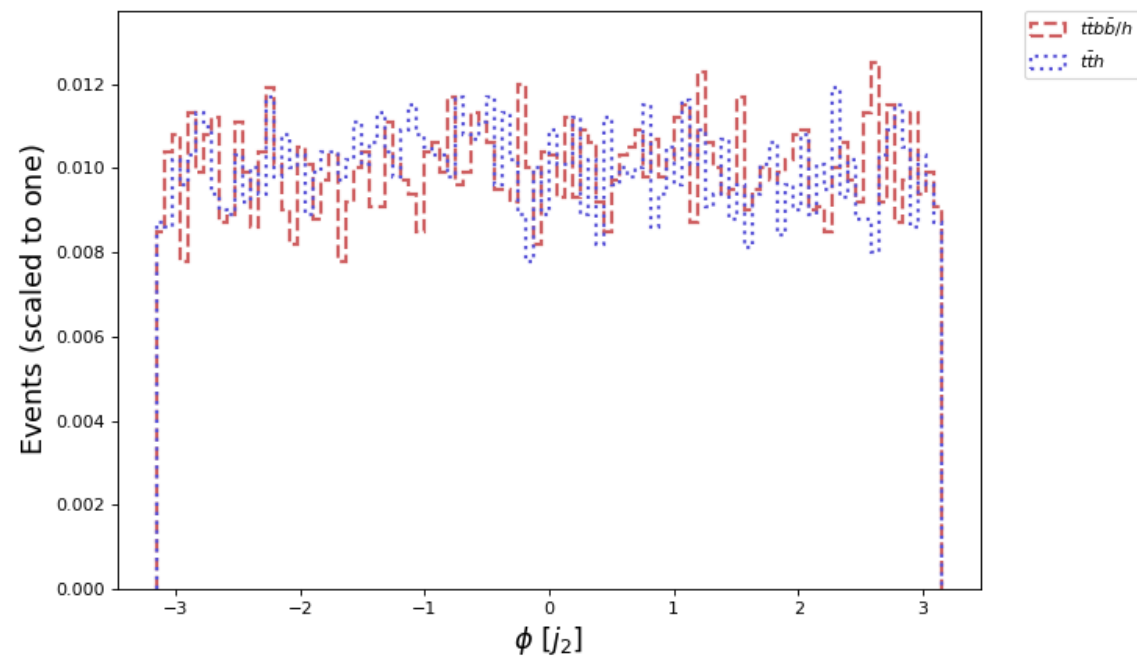
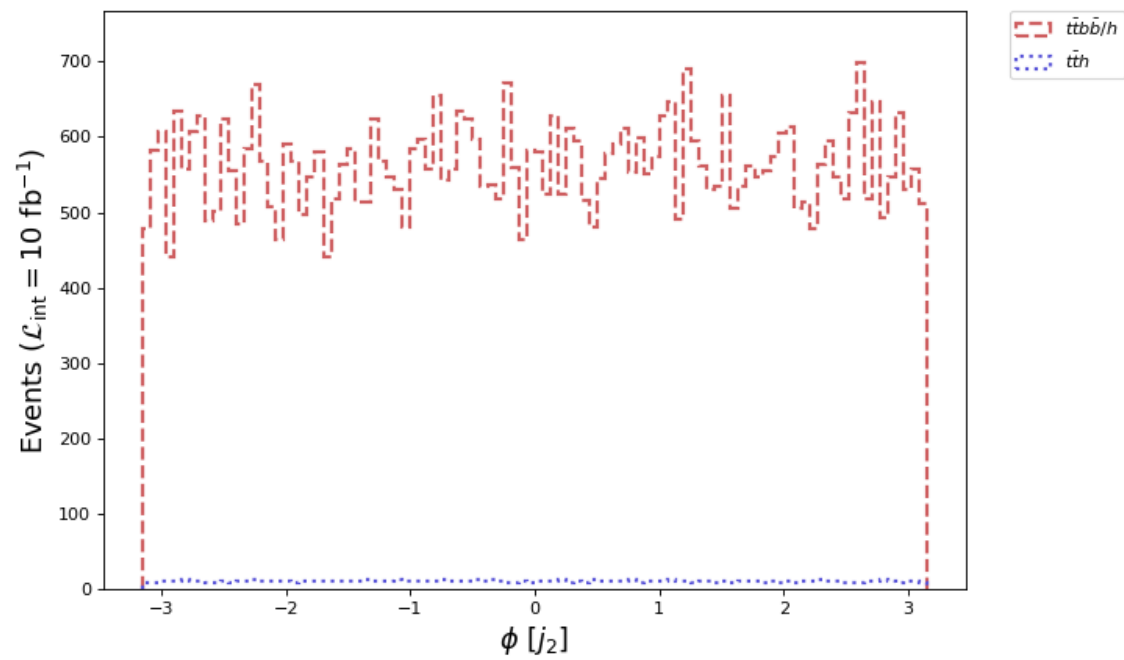
$$\phi(b_4)$$



$$\phi(j_1)$$

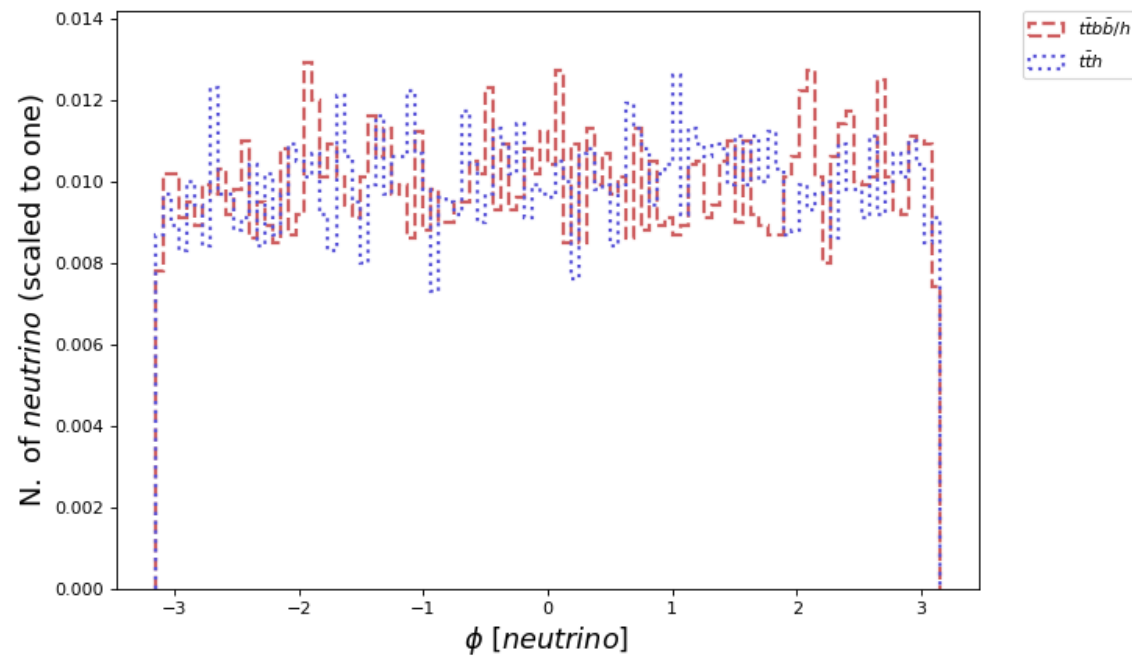
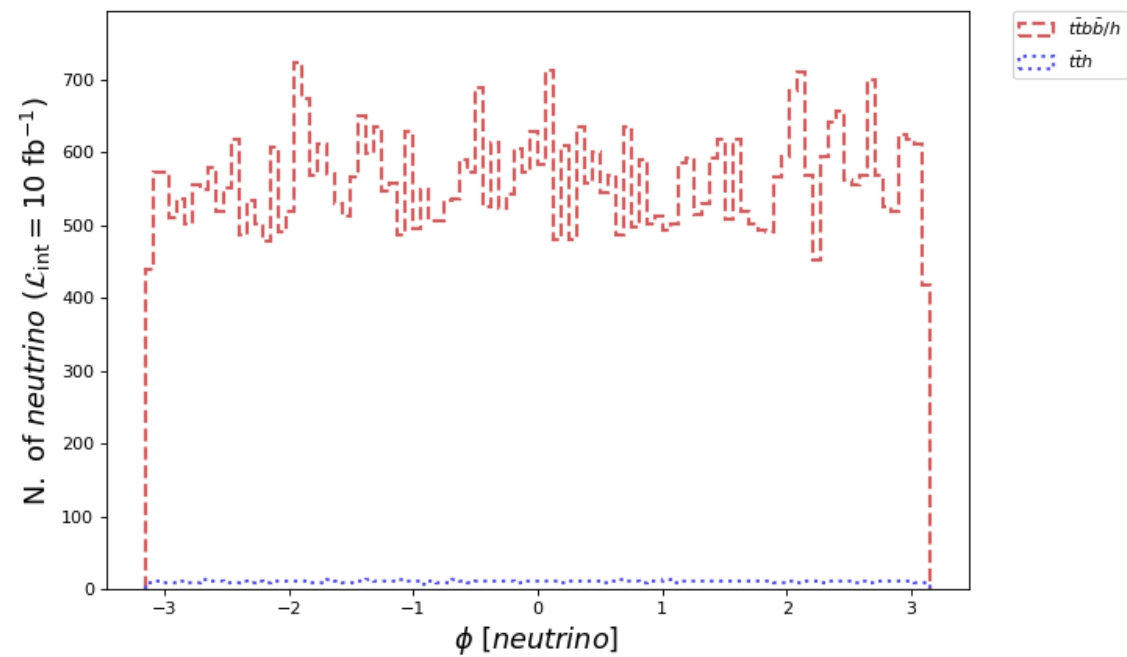


$$\phi(j_2)$$

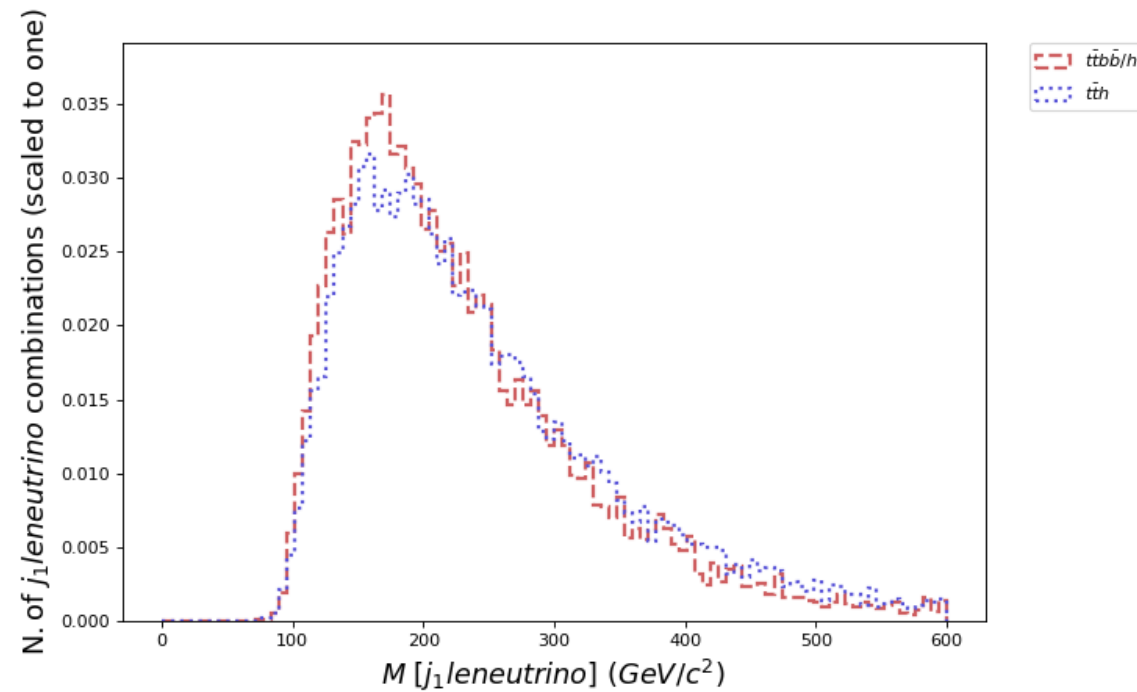
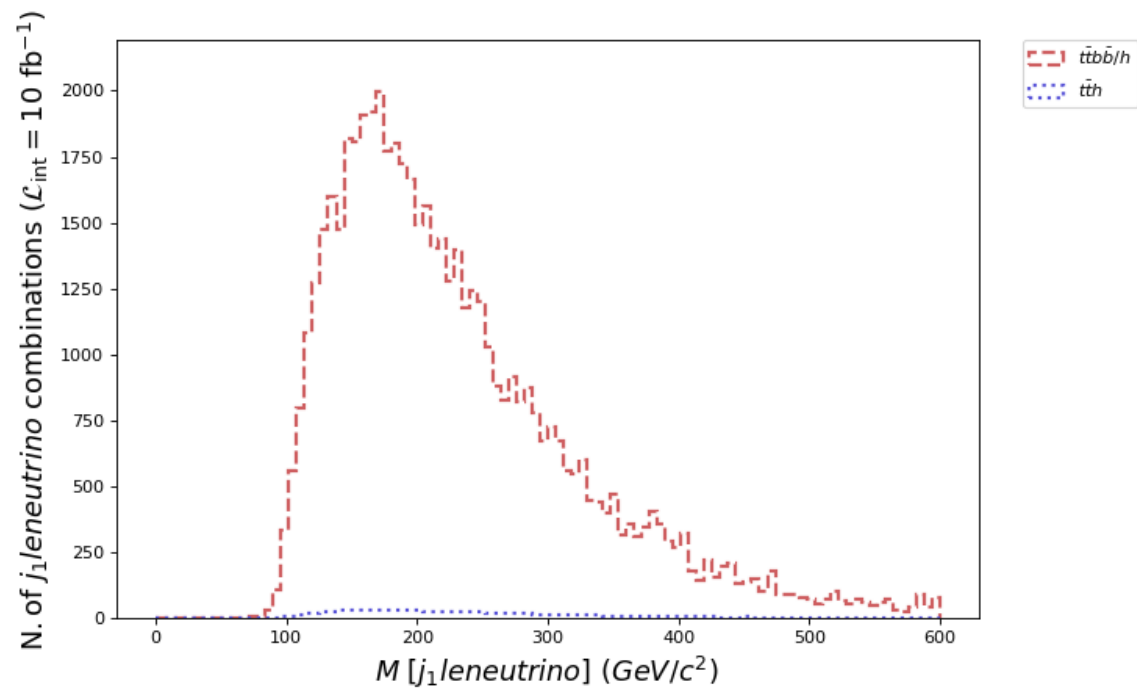




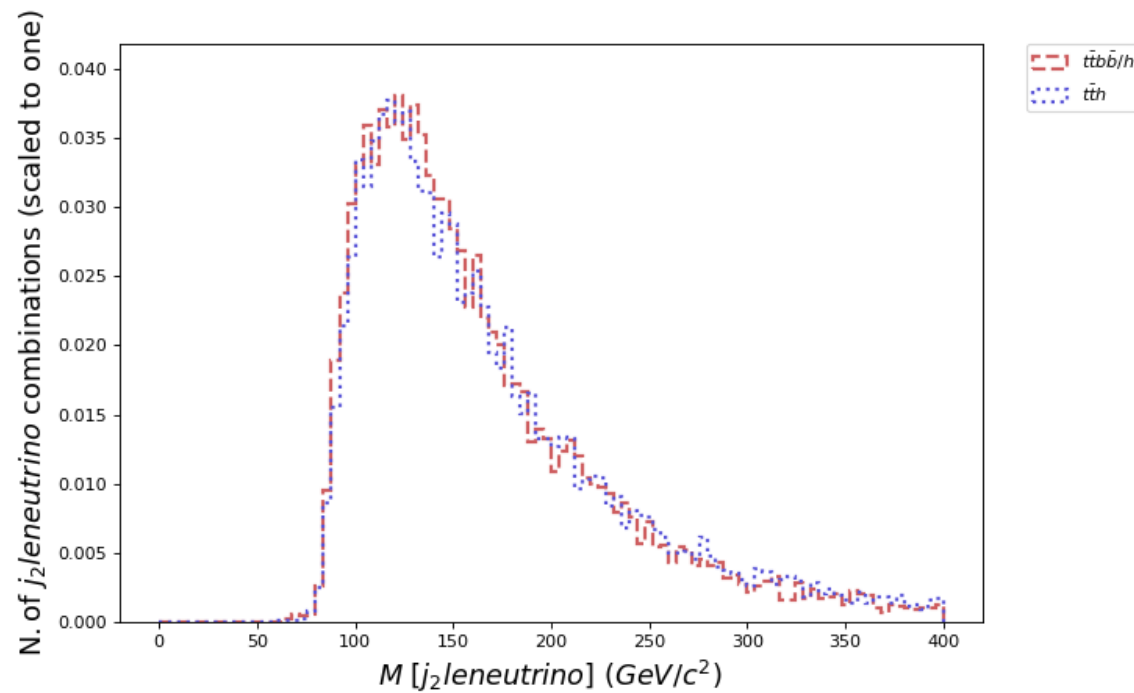
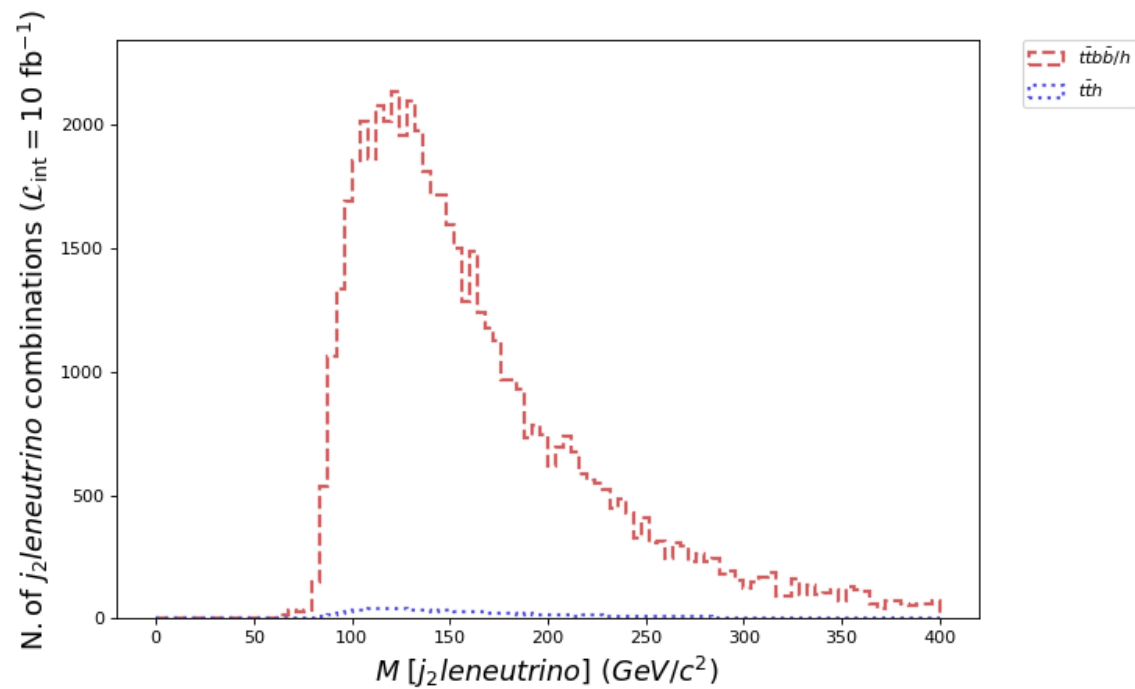
$$\phi(\nu_l)$$



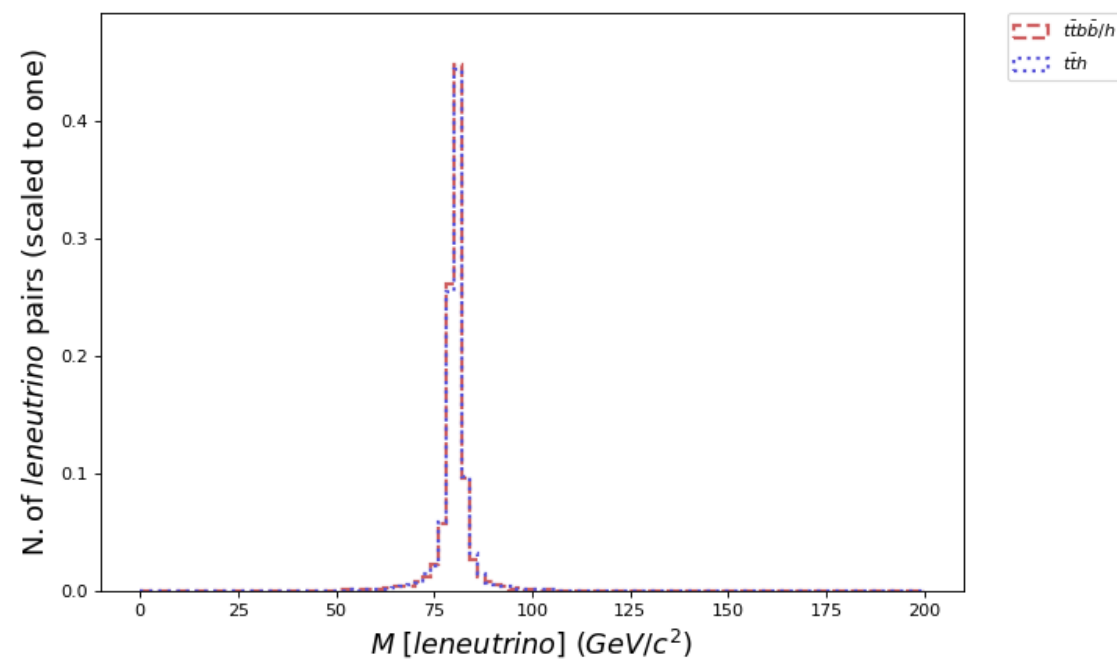
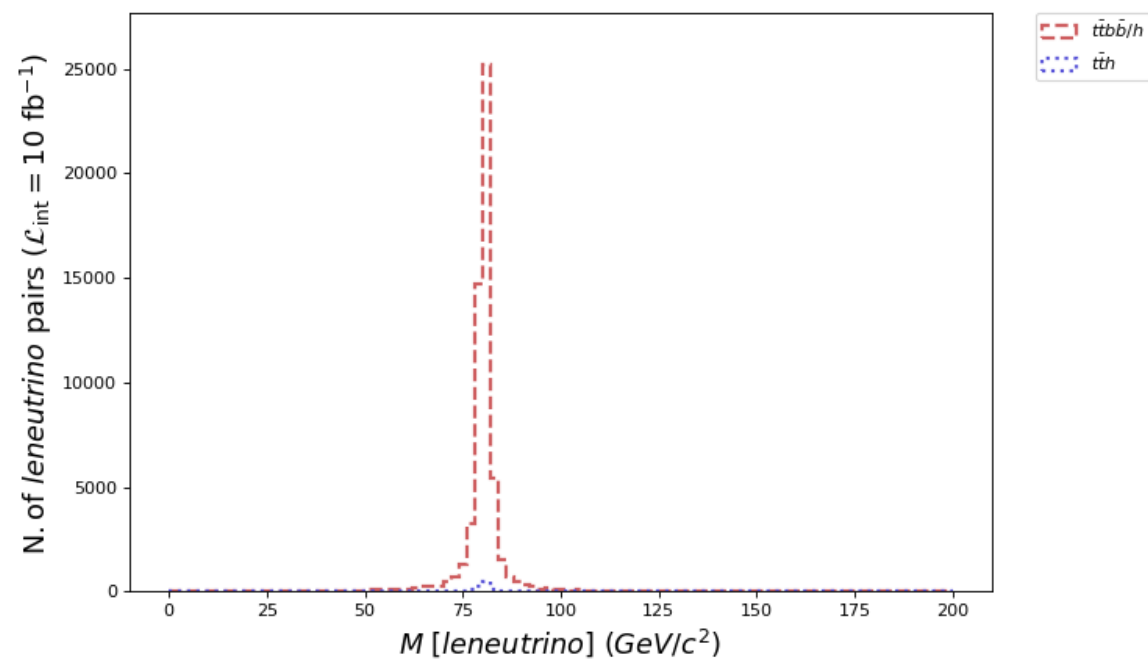
$$M(j_1, l, \nu_l)$$



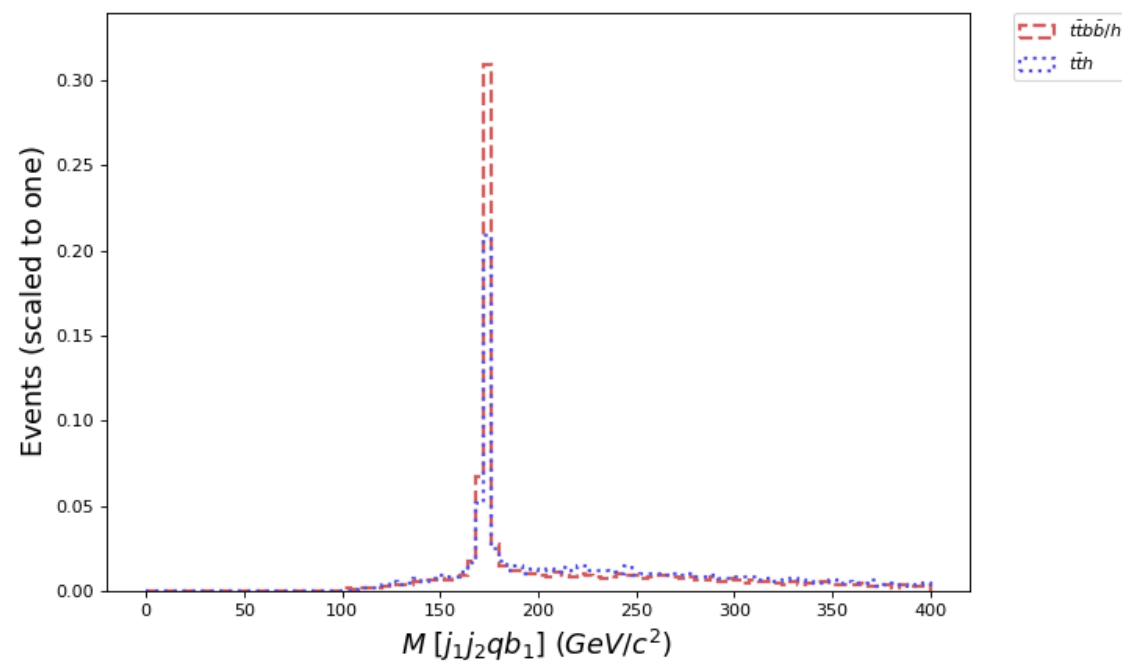
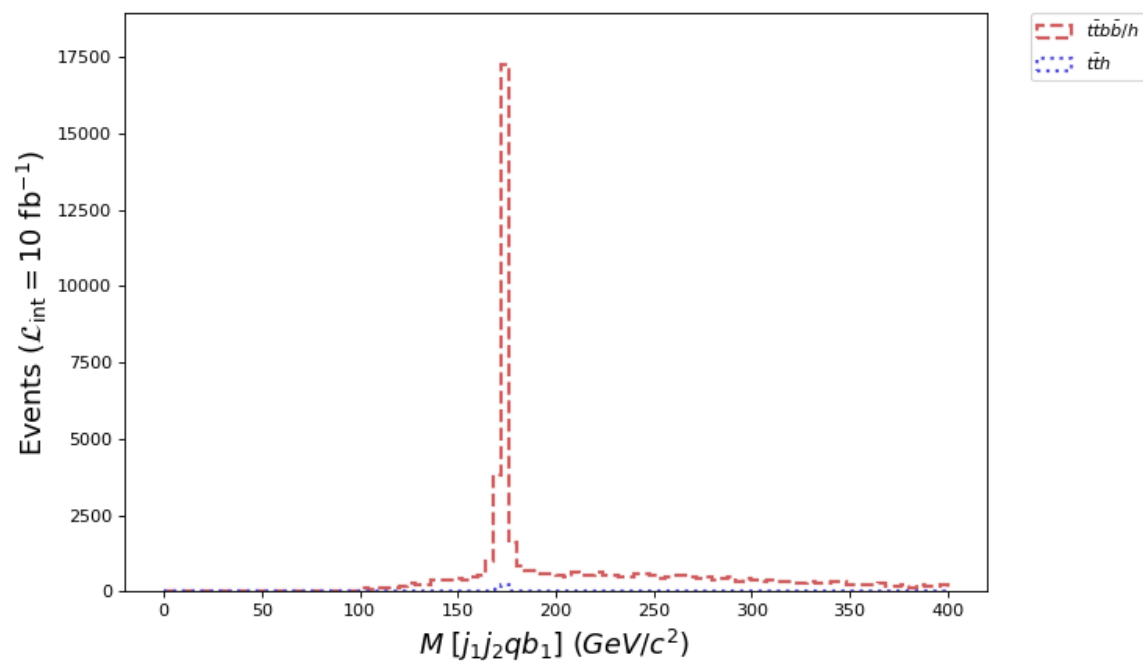
$$M(j_2, l, \nu_l)$$



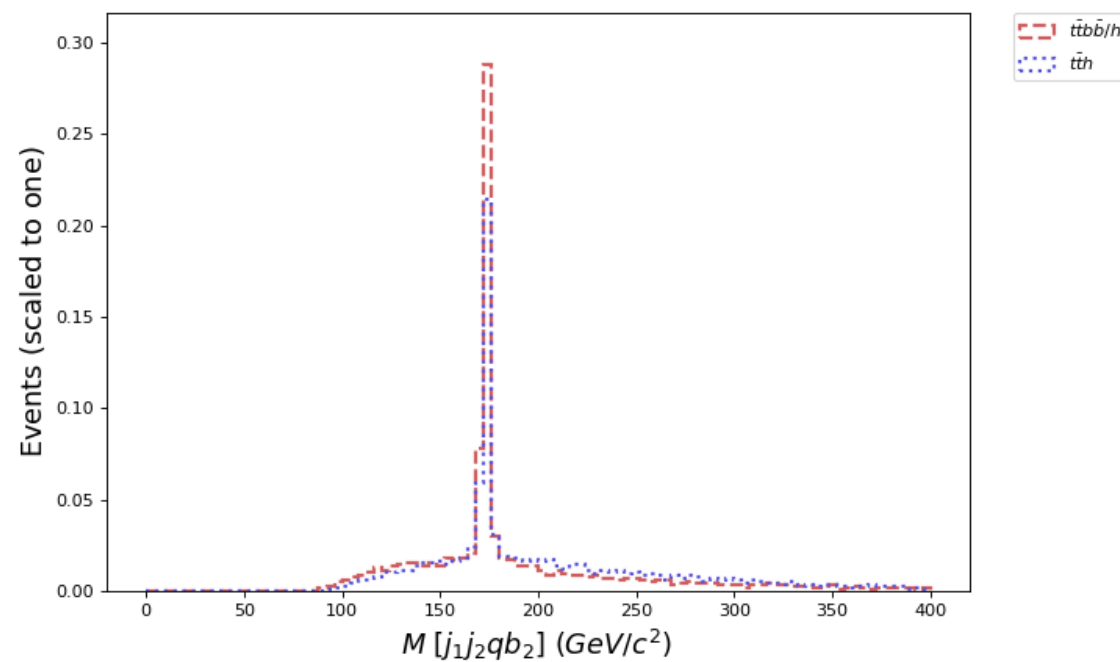
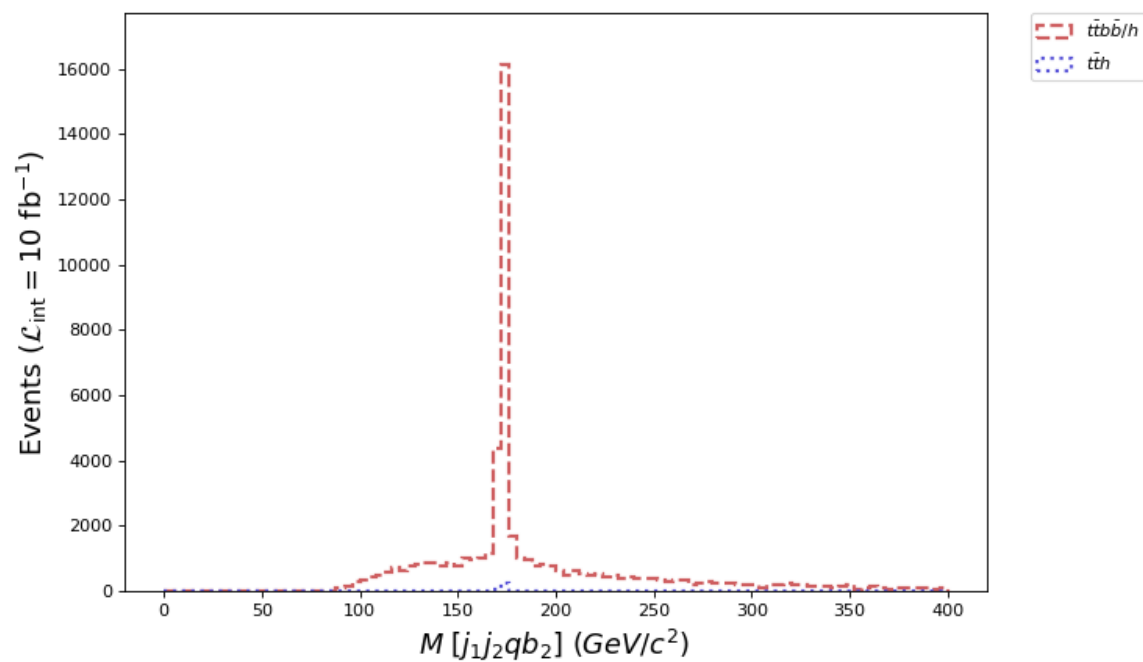
$$M(l, \nu_l)$$



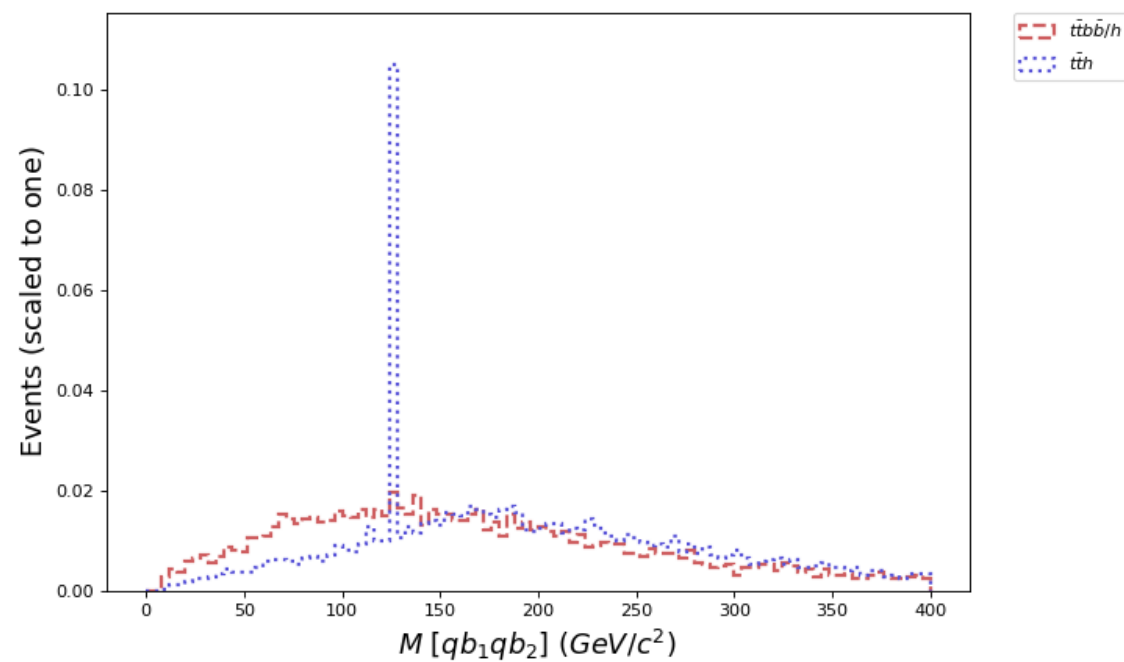
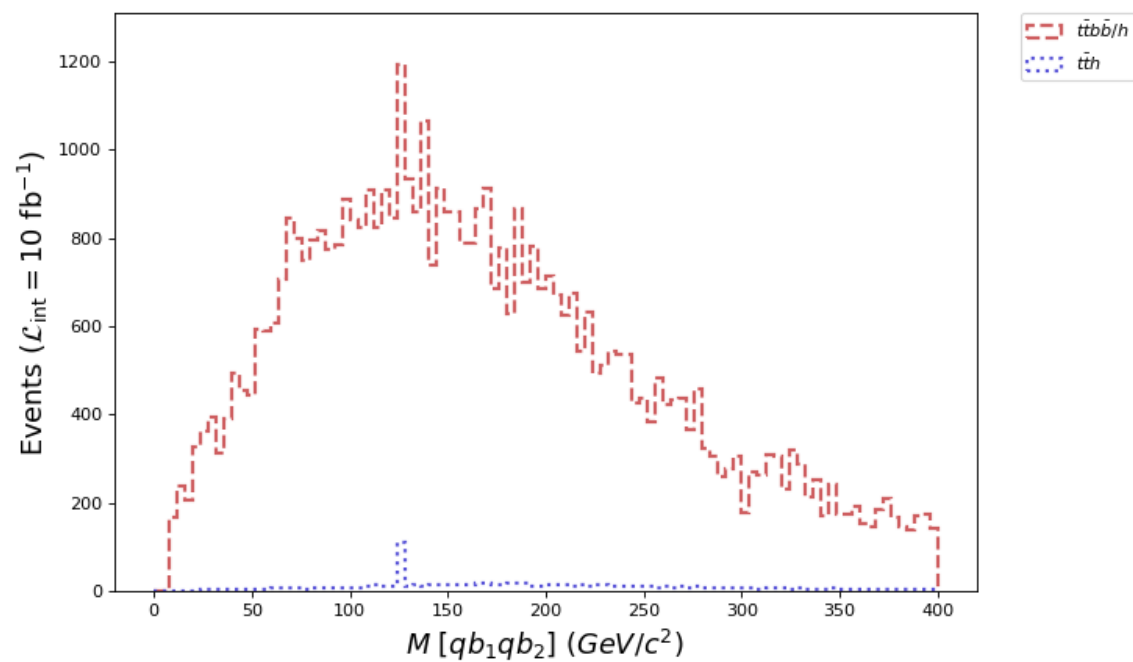
$$M(j_1, j_2, b_1)$$



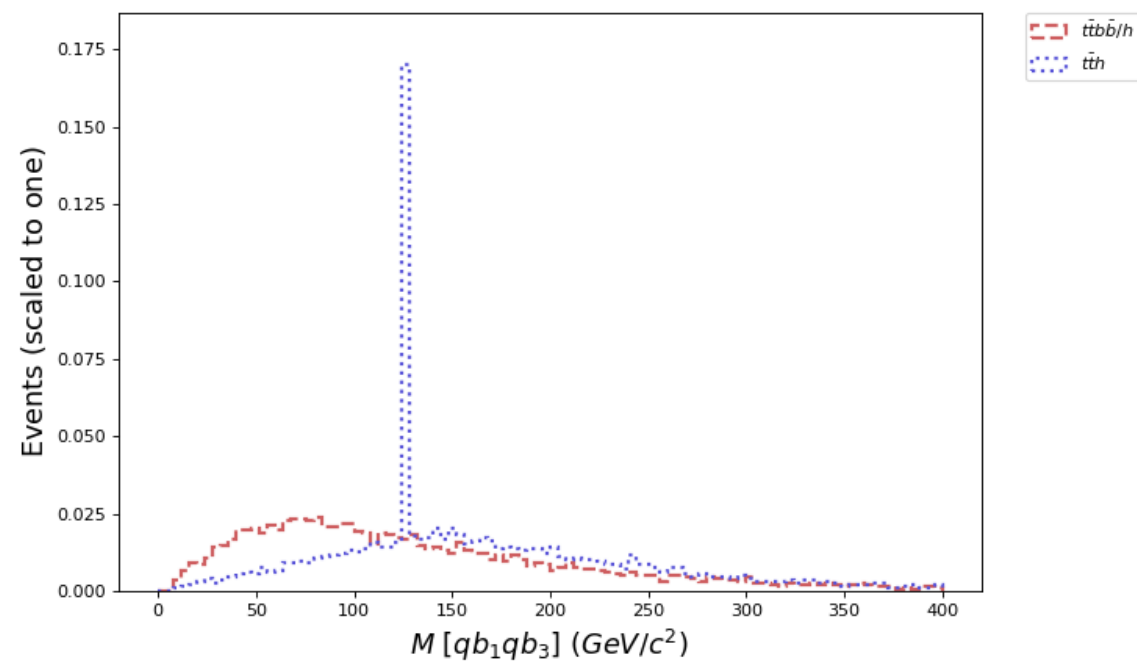
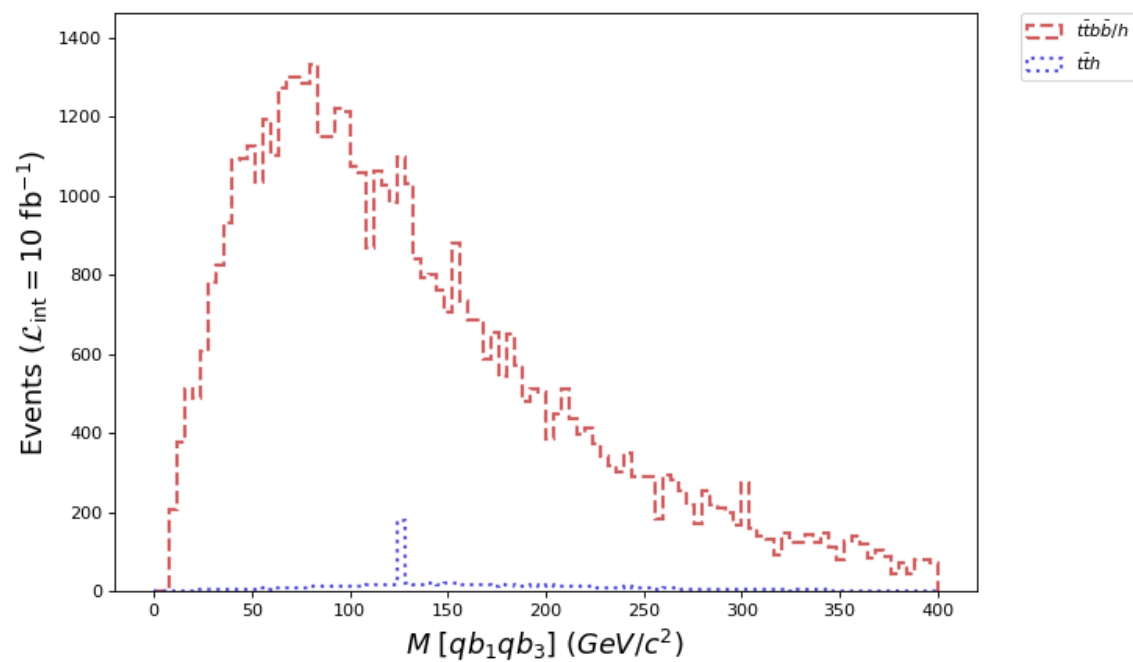
$$M(j_1, j_2, b_2)$$



$$M(b_1, b_2)$$

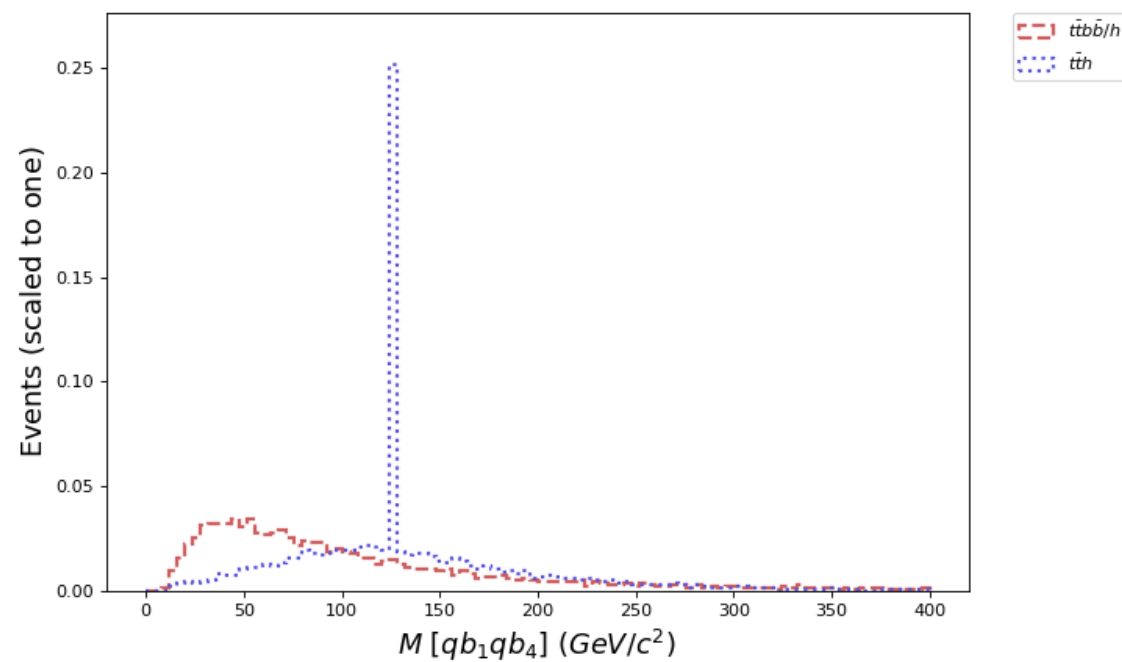
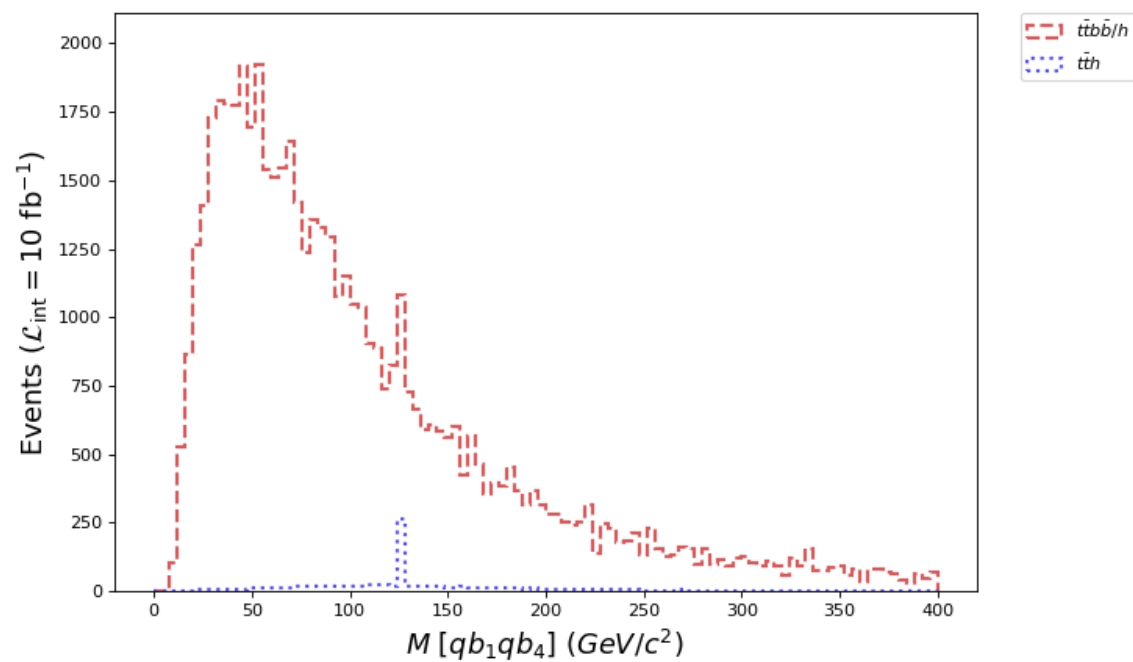


$$M(b_1, b_3)$$

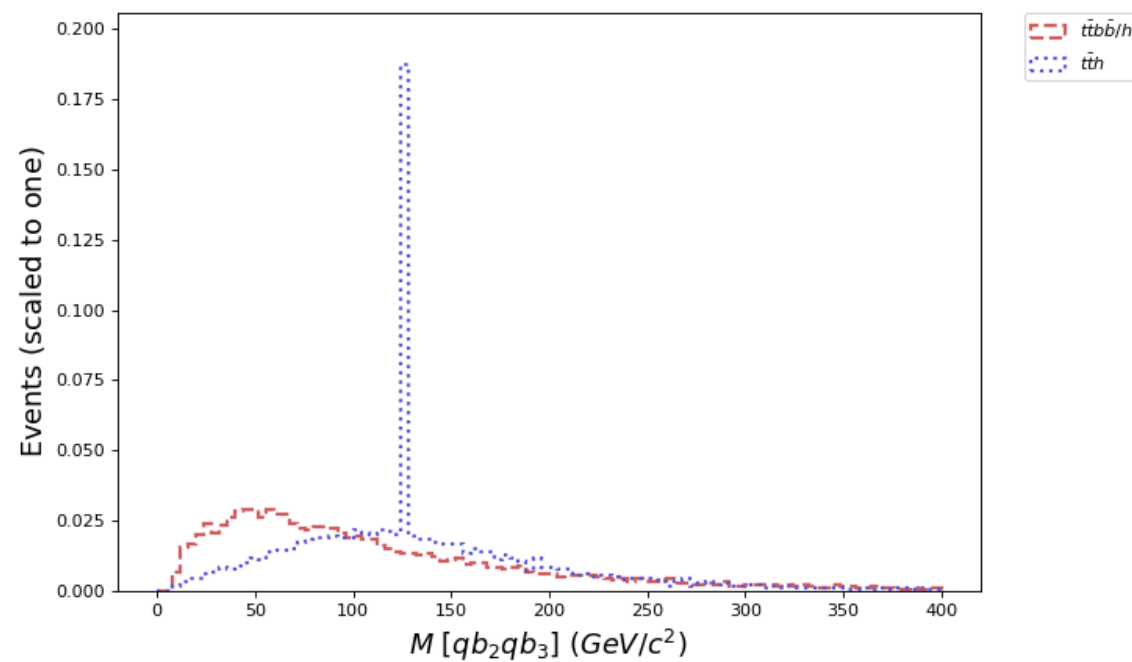
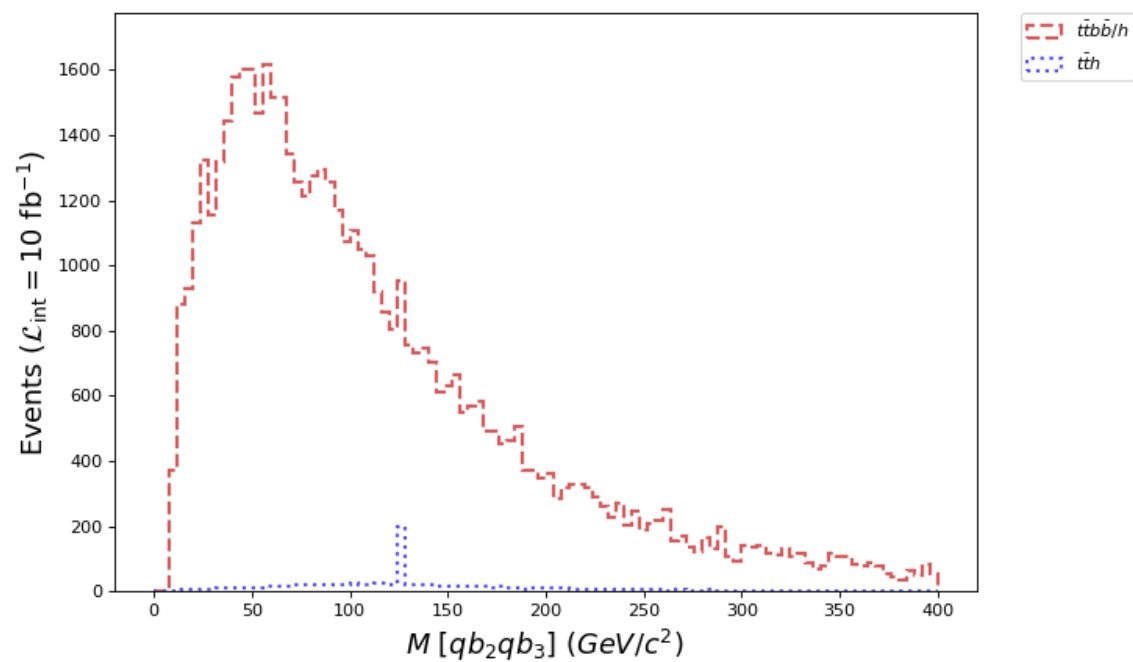




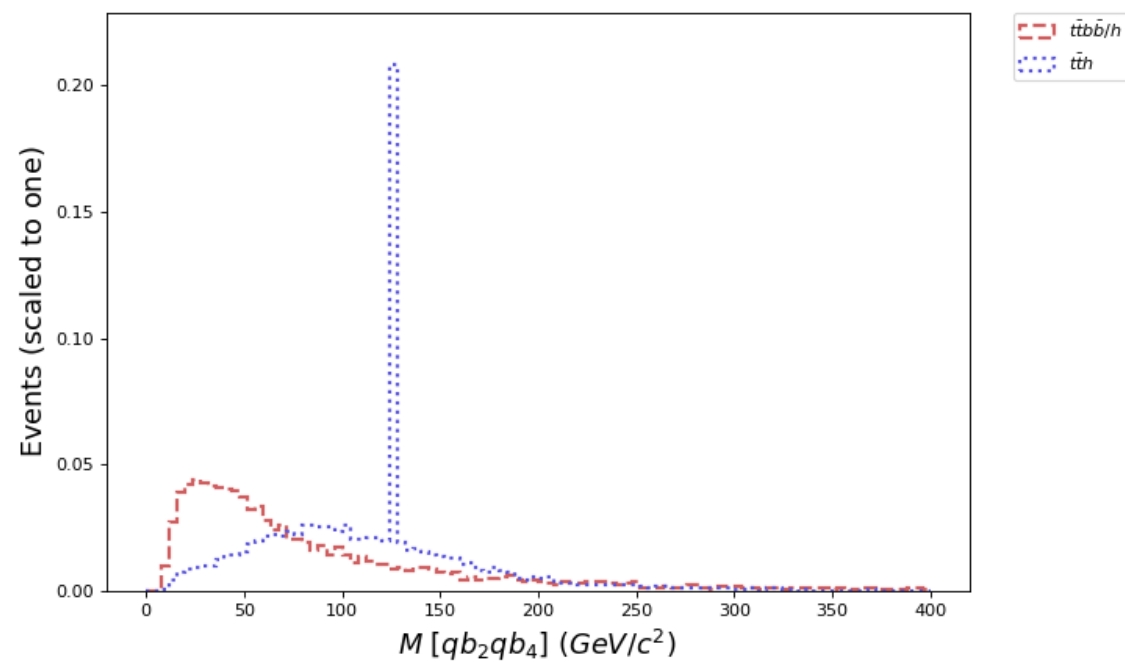
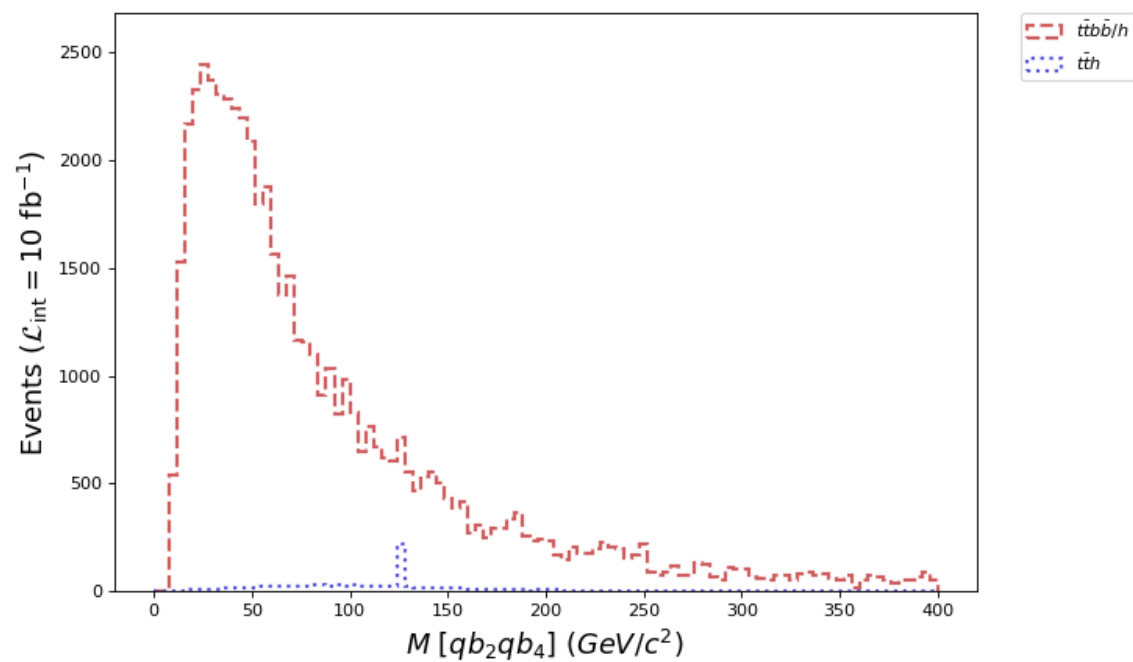
$$M(b_1, b_4)$$



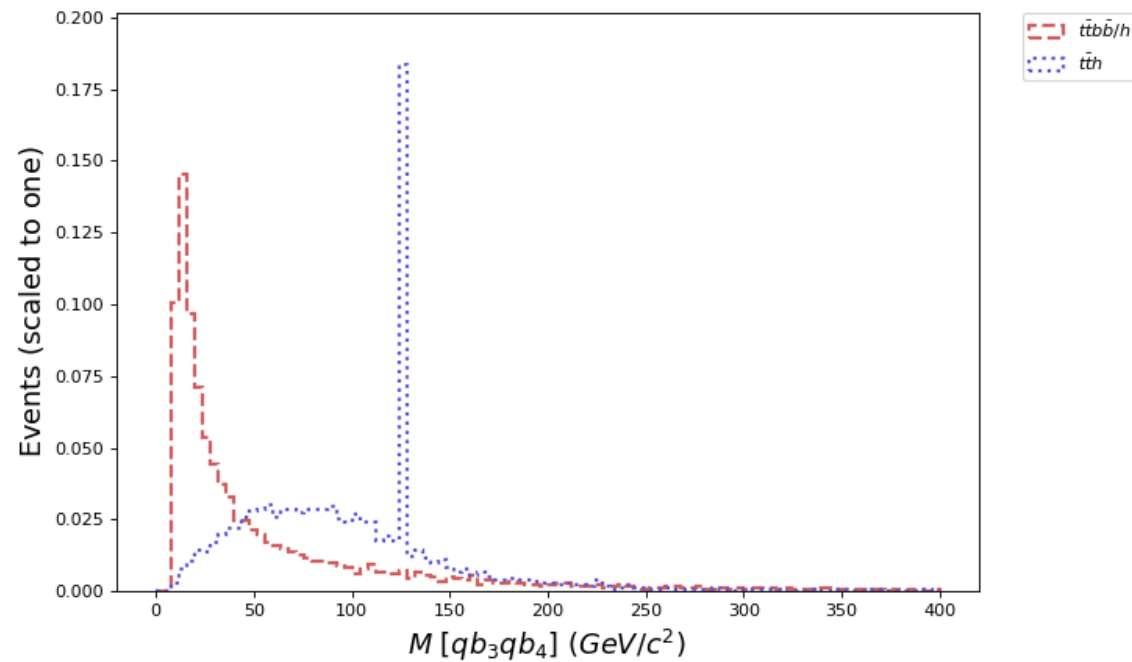
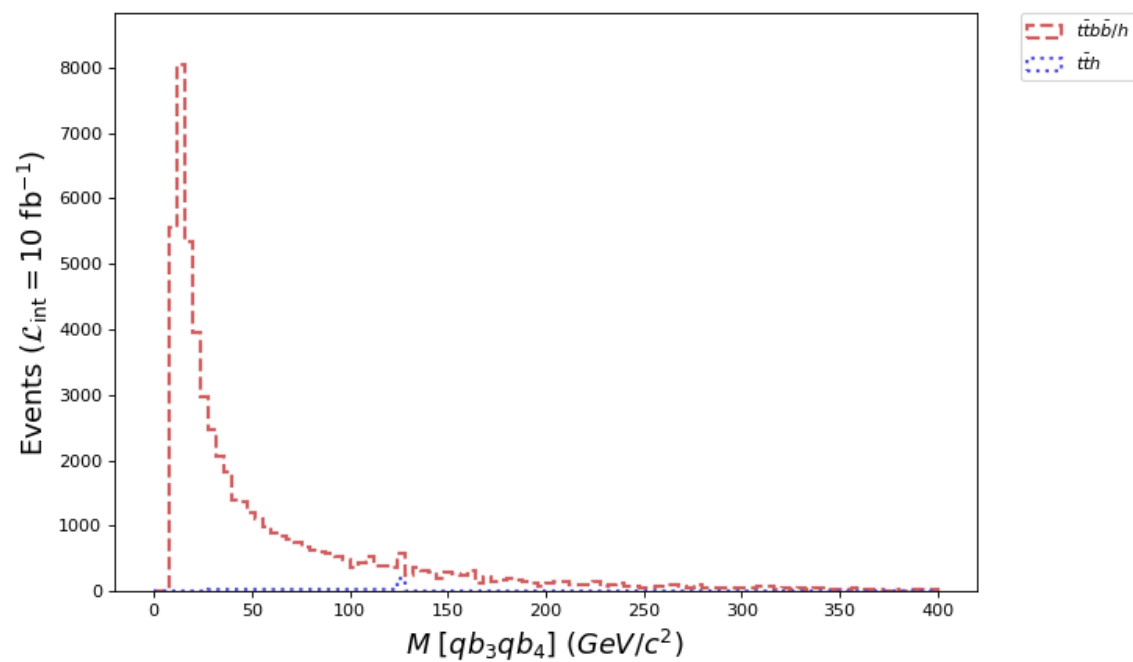
$$M(b_2, b_3)$$



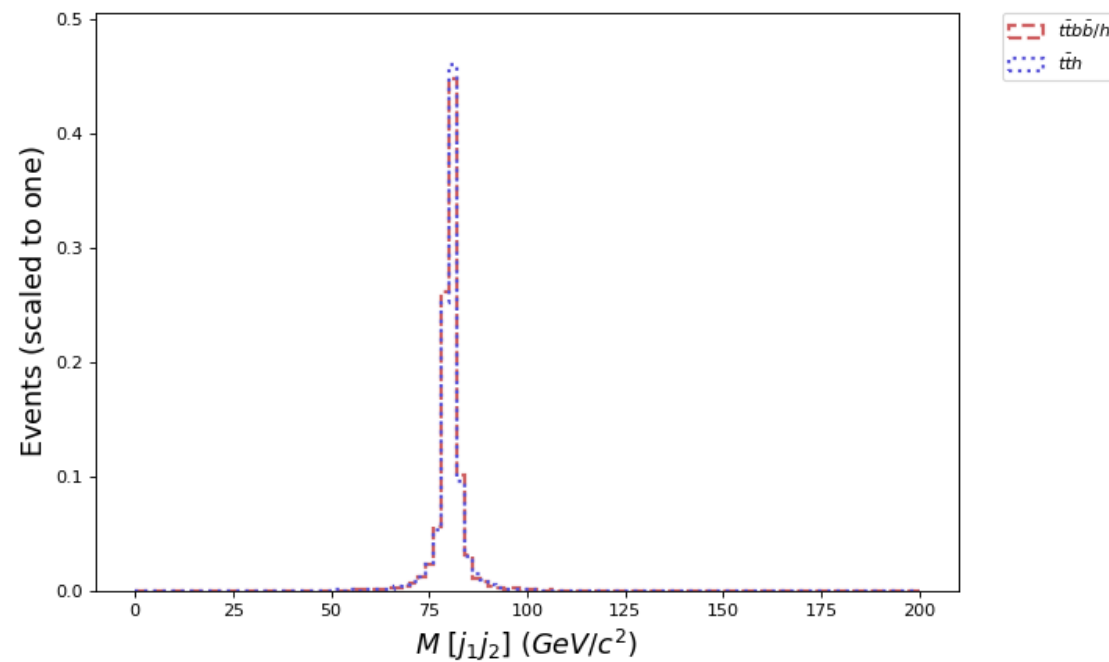
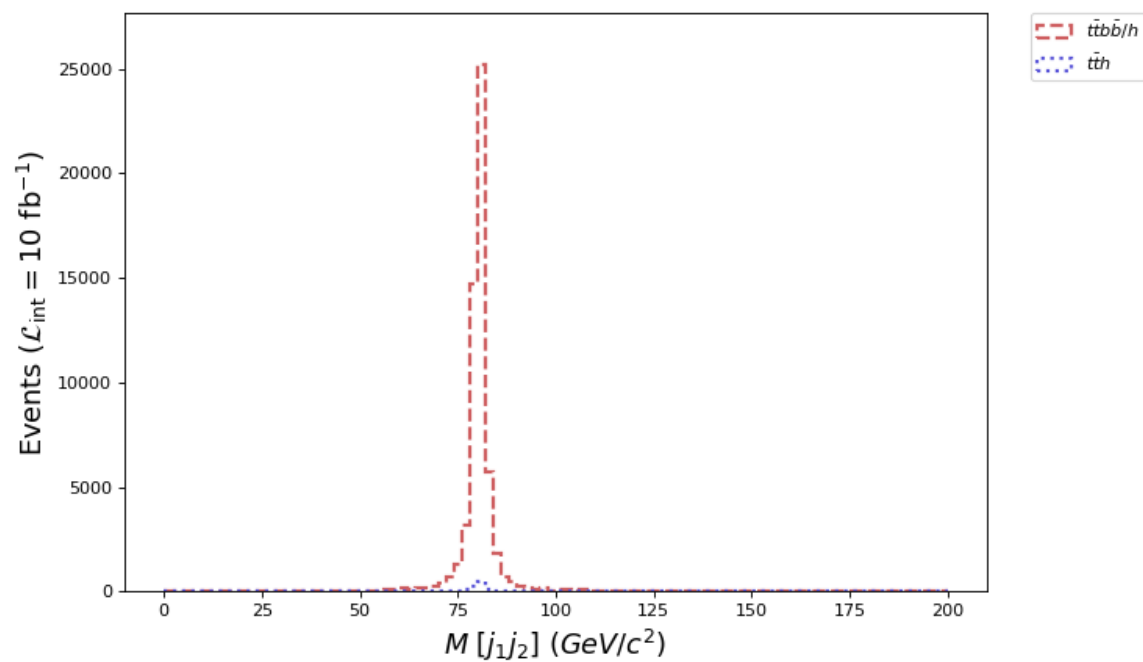
$$M(b_2, b_4)$$



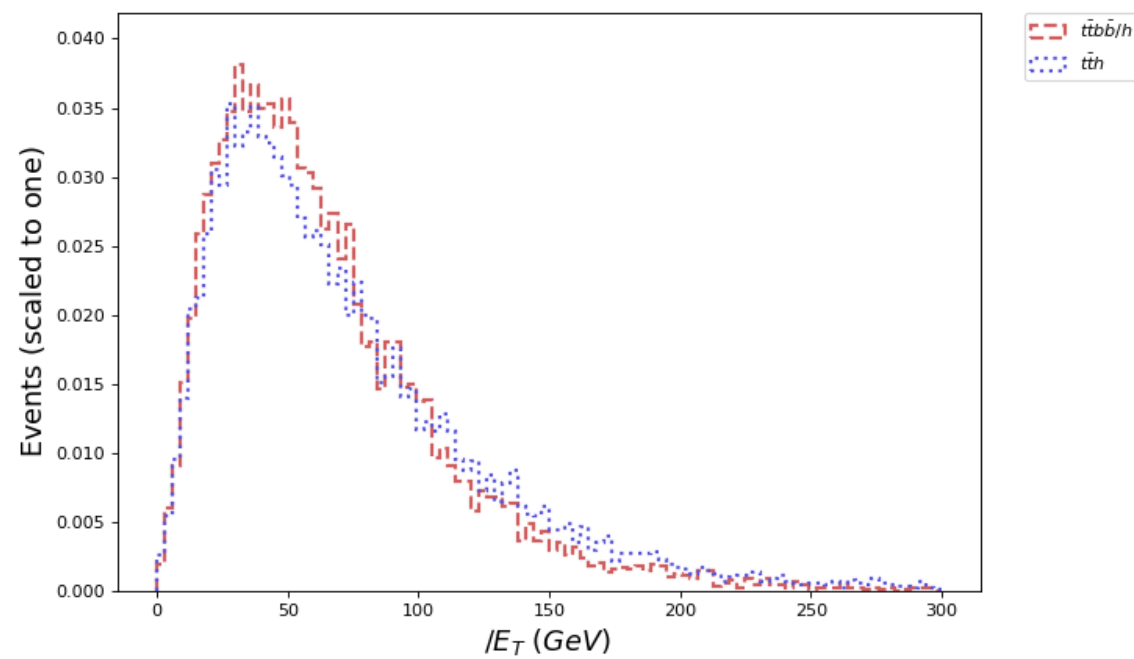
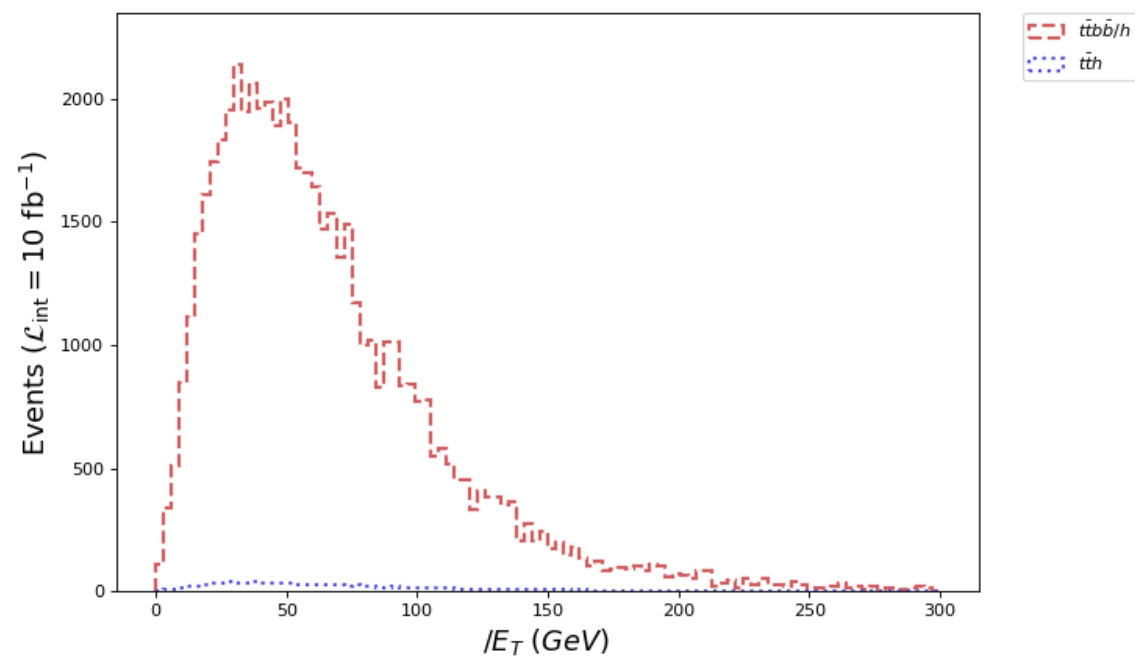
$$M(b_3, b_4)$$



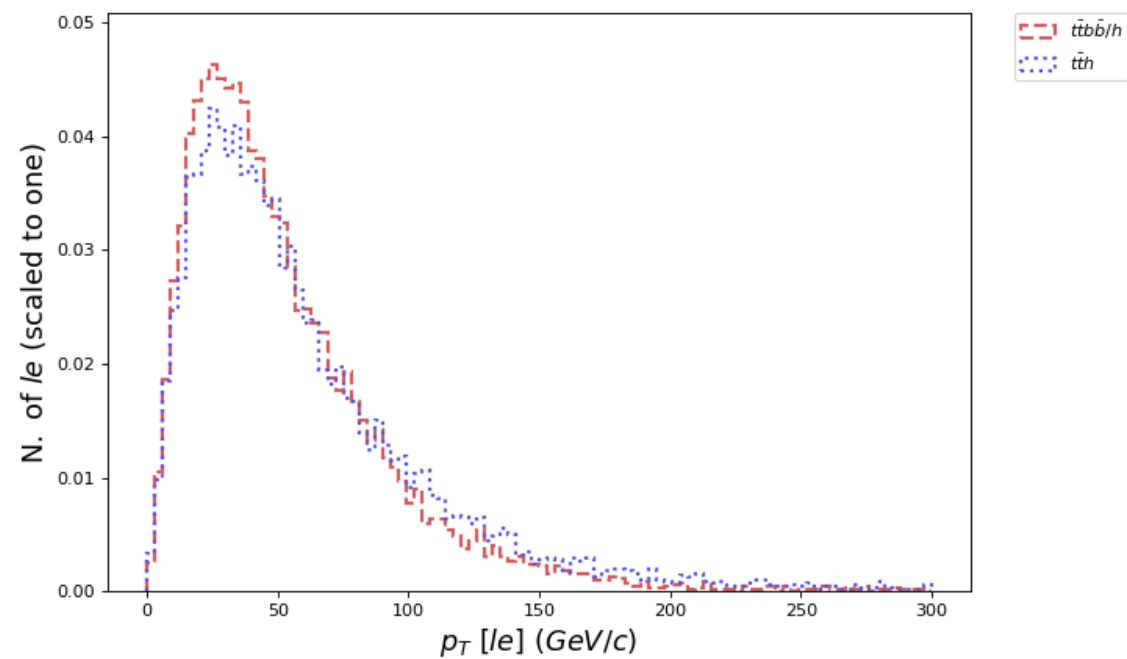
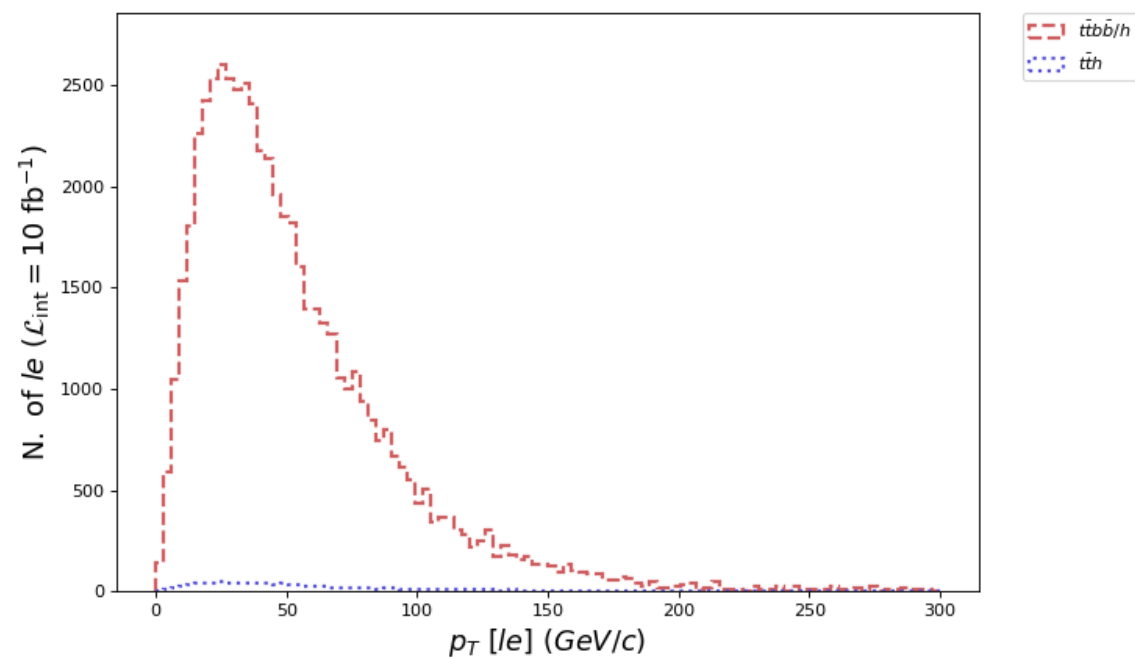
$$M(j_1, j_2)$$



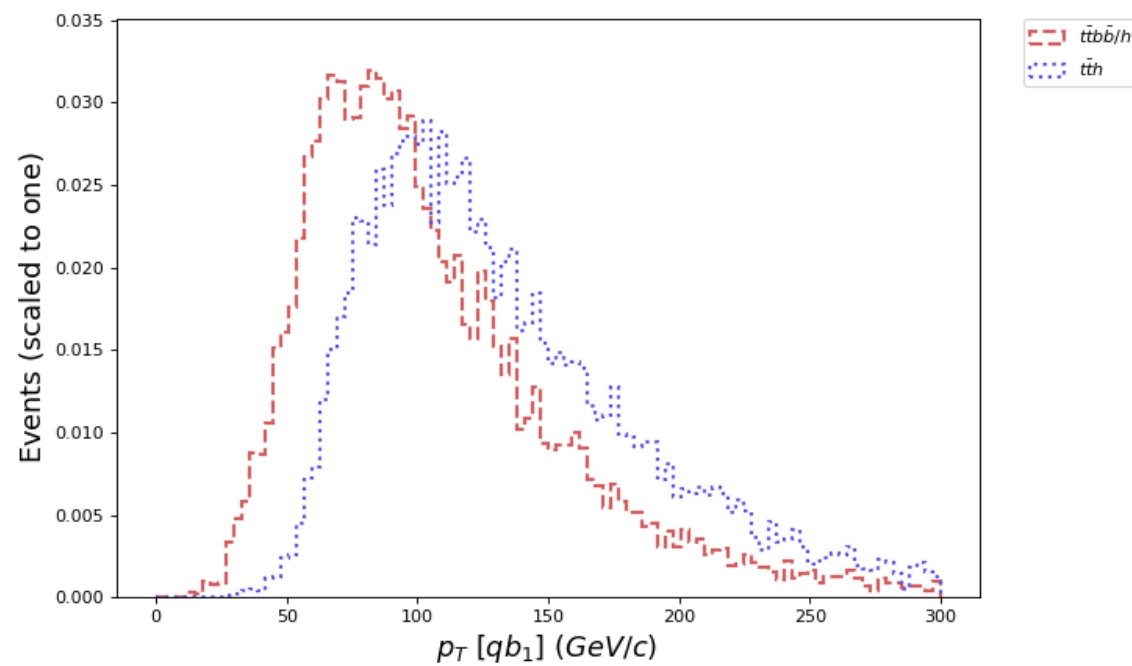
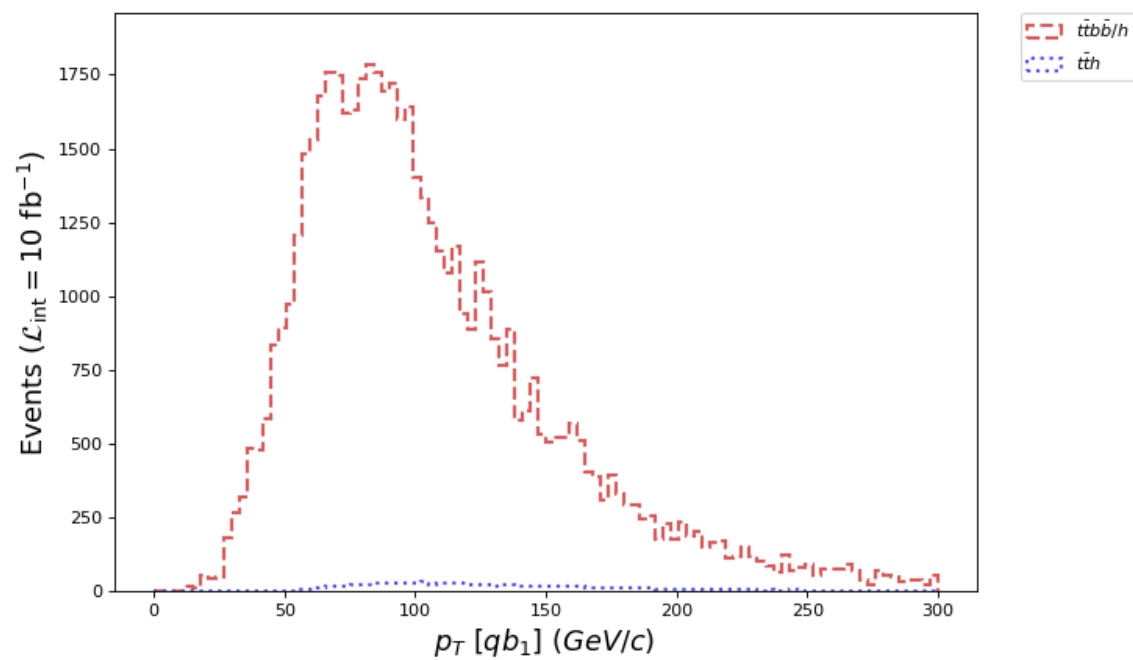
# $MET$



$$p_T(l)$$

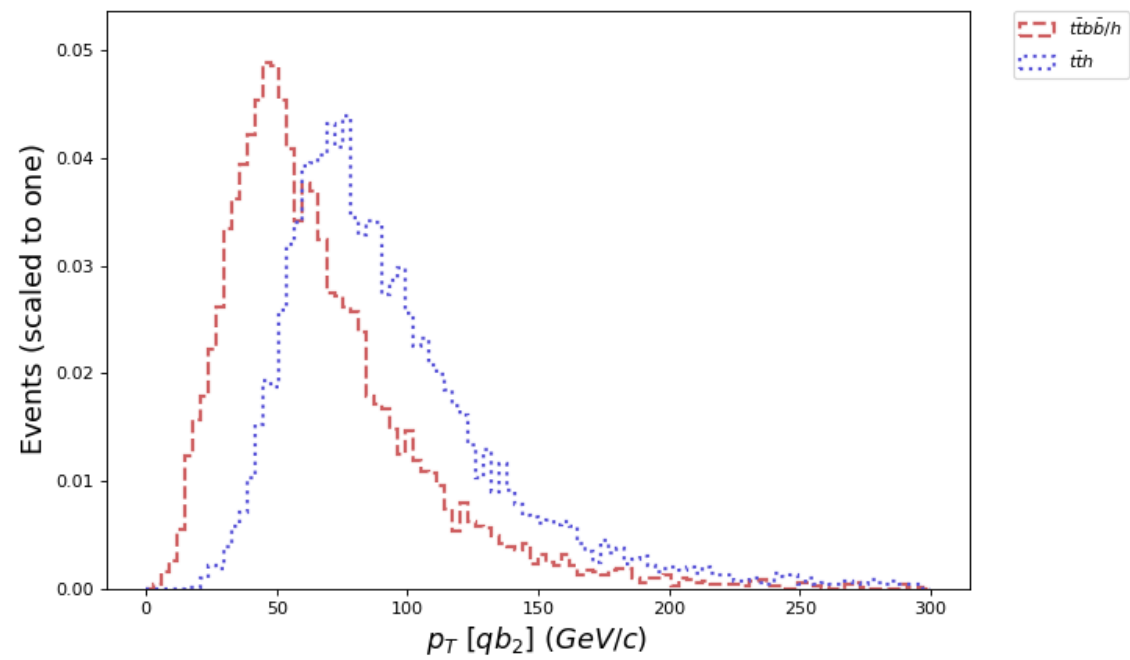
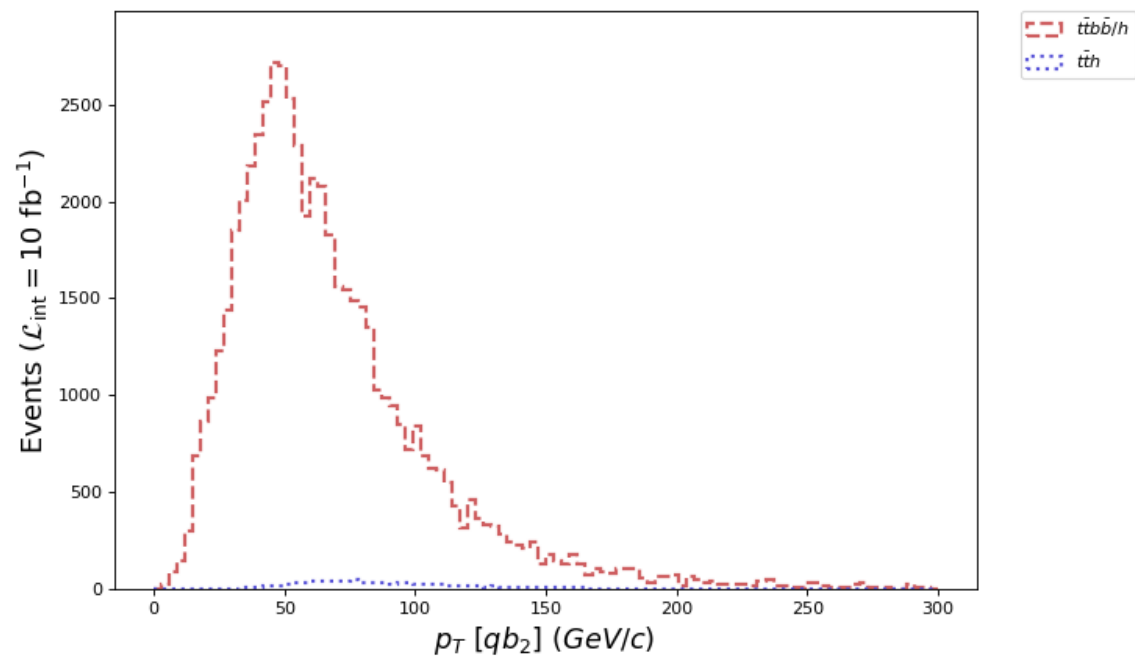


$$p_T(b_1)$$

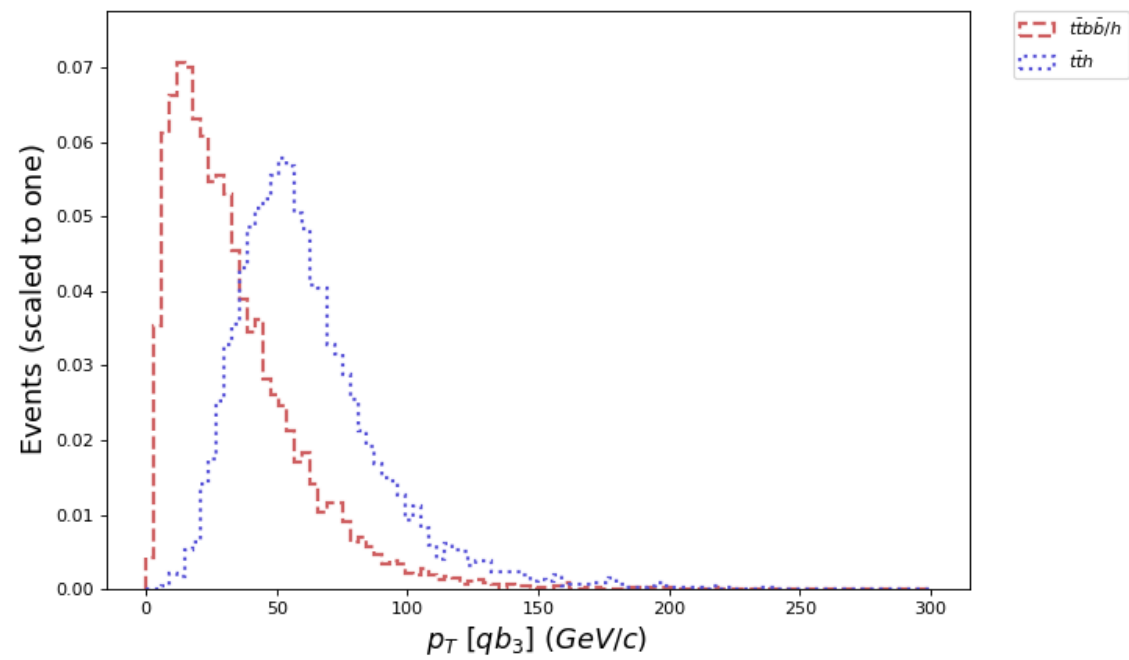
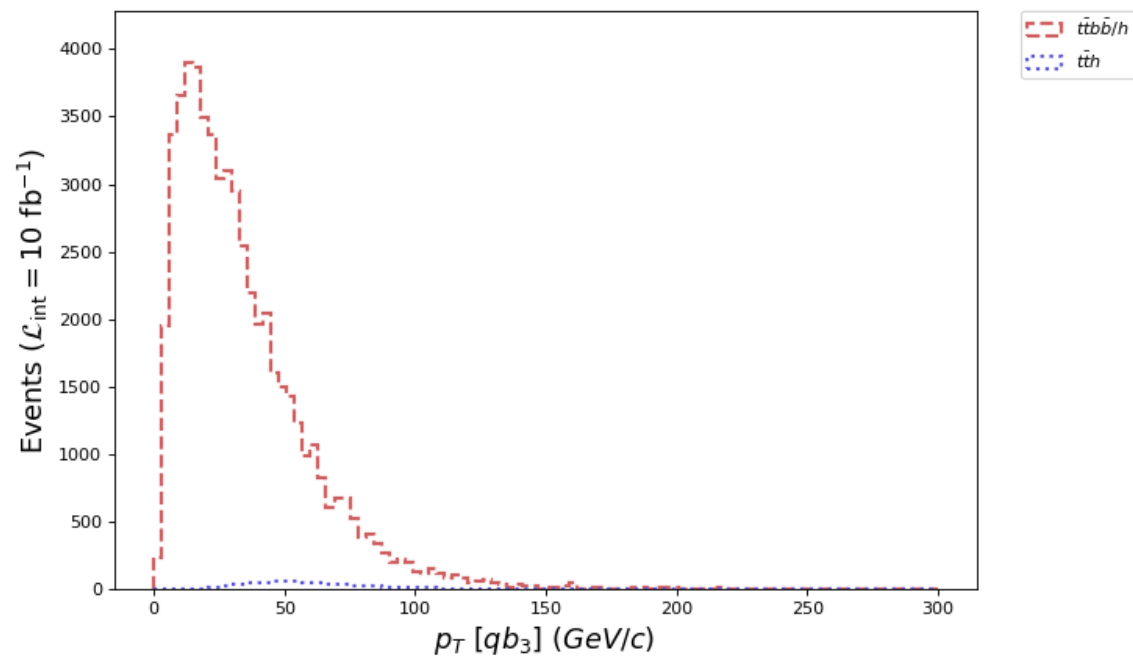




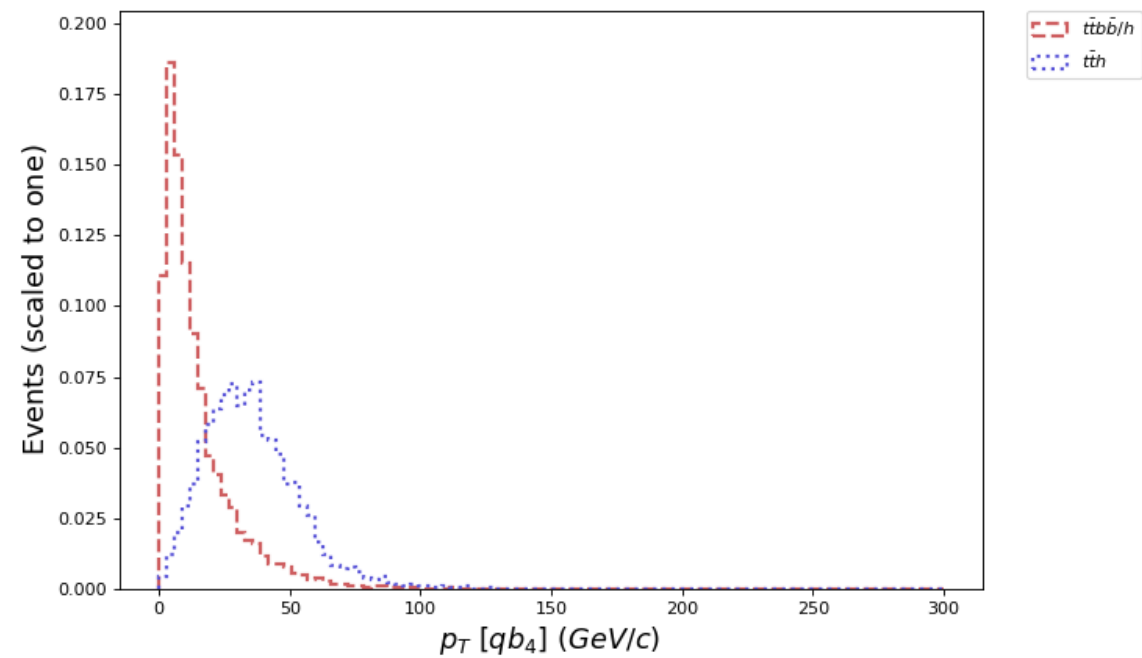
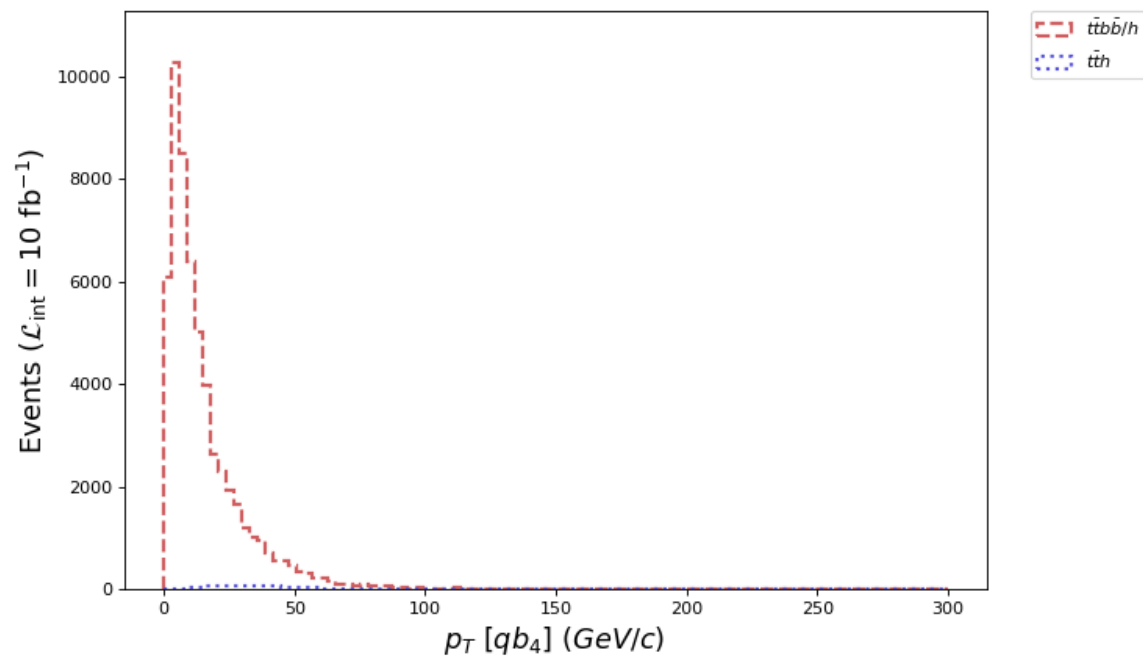
$$p_T(b_2)$$



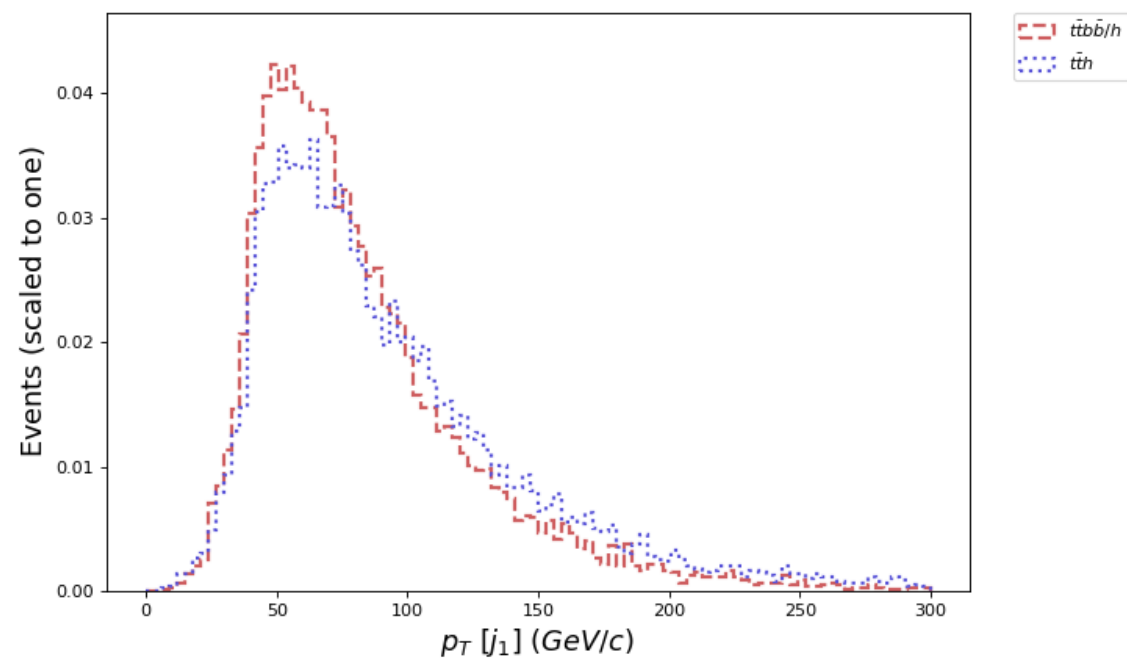
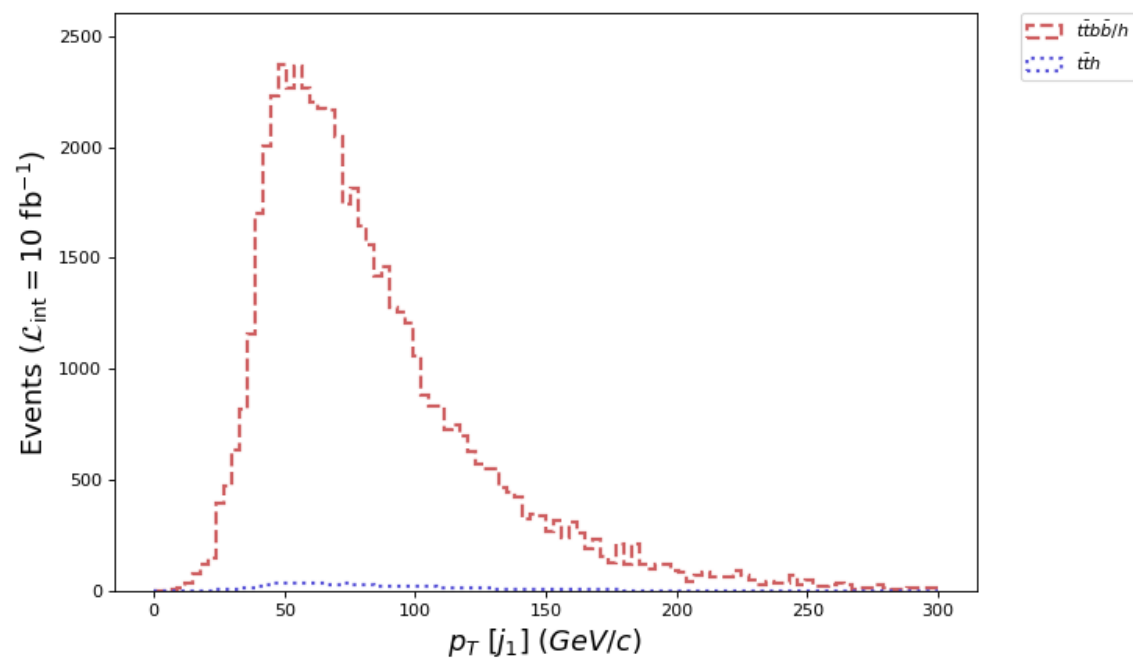
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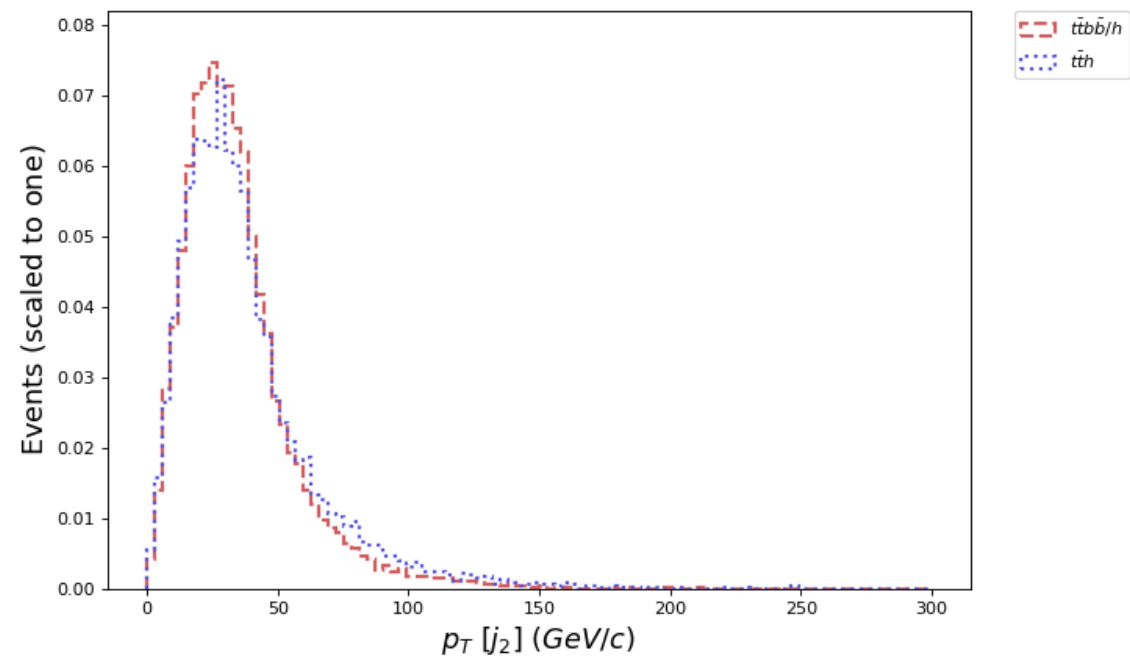
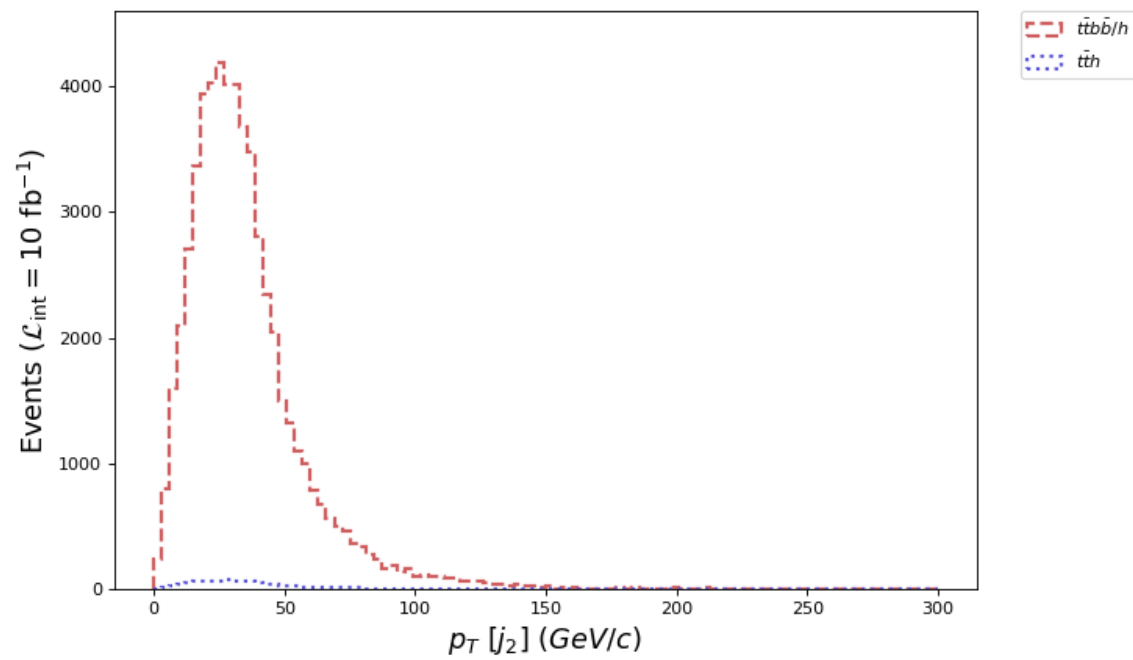
$$p_T(b_4)$$



$$p_T(j_1)$$



$$p_T(j_2)$$



$$p_T(\nu_l)$$

