

Status Report

Tokyo Institute of Technology



Masahiro Tanaka

17 June 2014

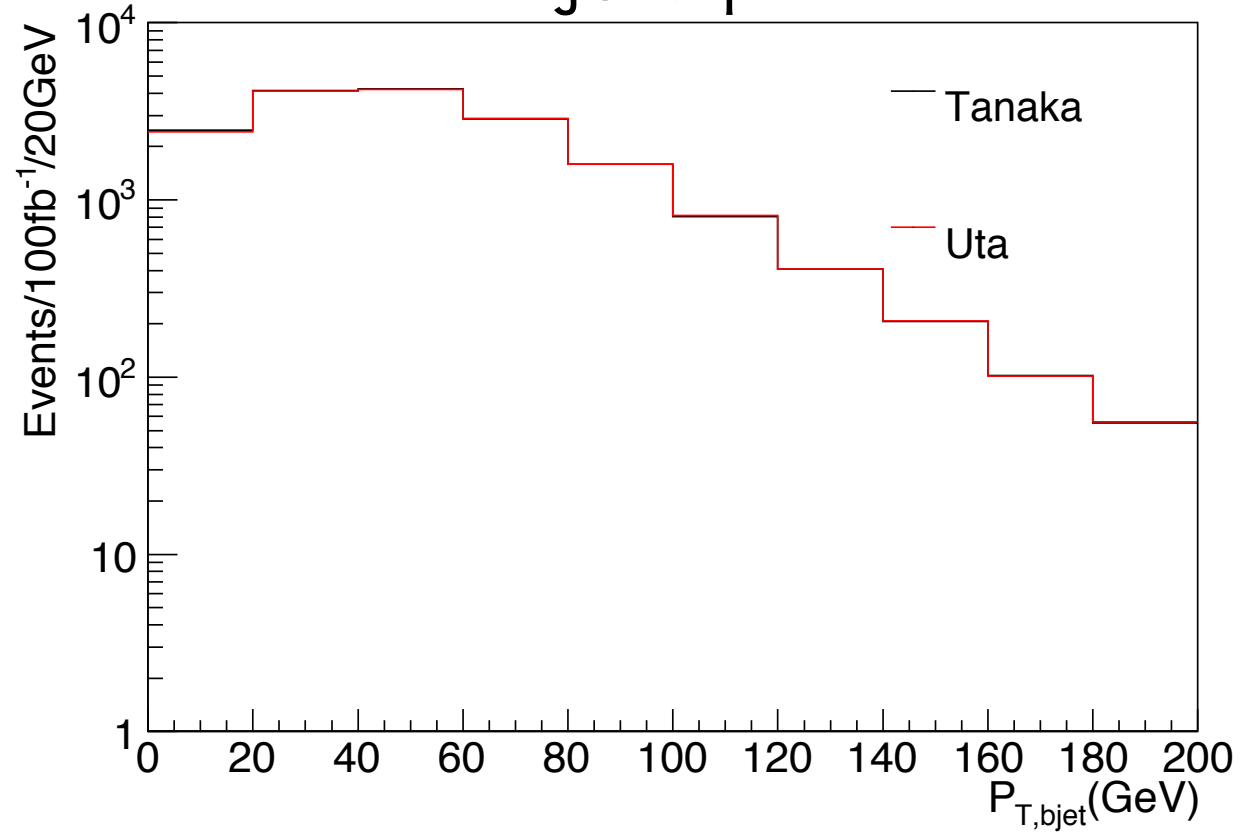


Cross check between two CChbb samples

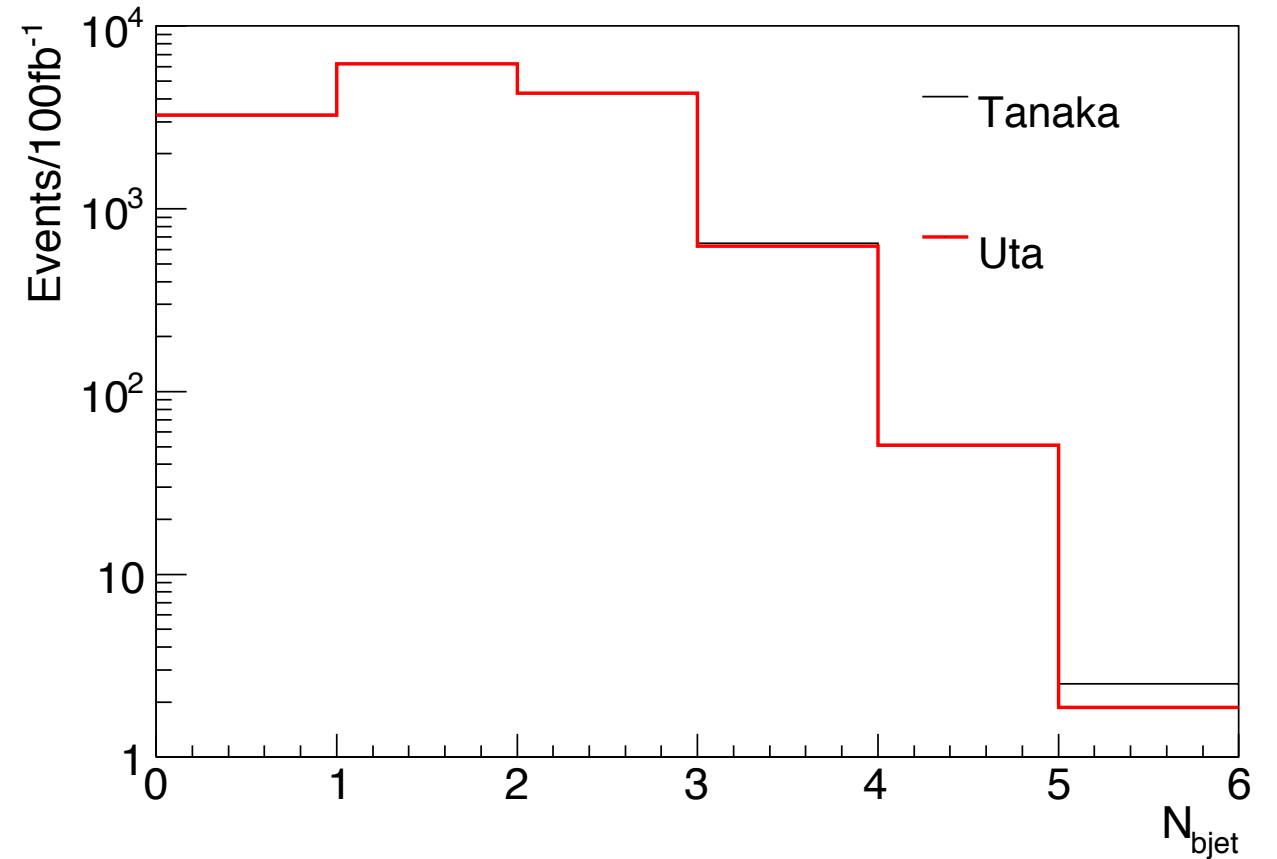
- To find causes of differences between Uta's and Tanaka's analysis result
- Two CChbb samples made by tools of Uta or Tanaka
- 200,000 events are made
- 100 fb^{-1} are assumed
- Distributions of each parameters are compared
- No cuts are used to each plots

Each parameter

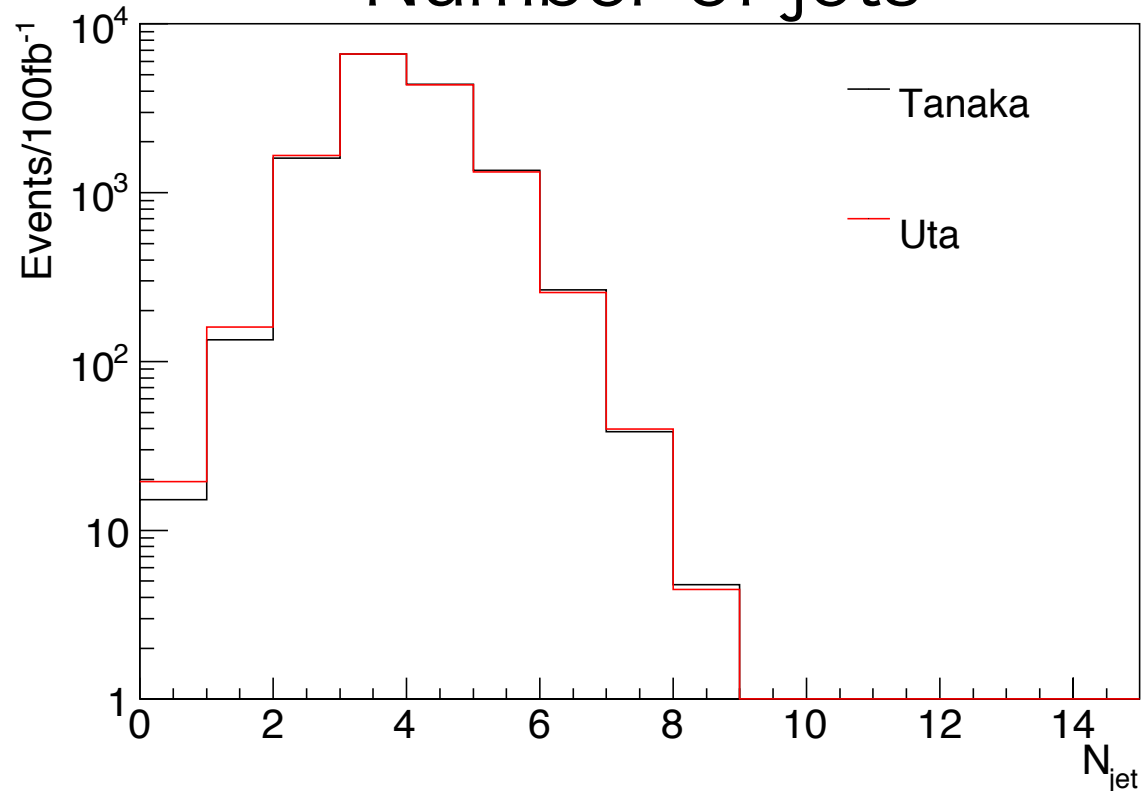
b-jets pT



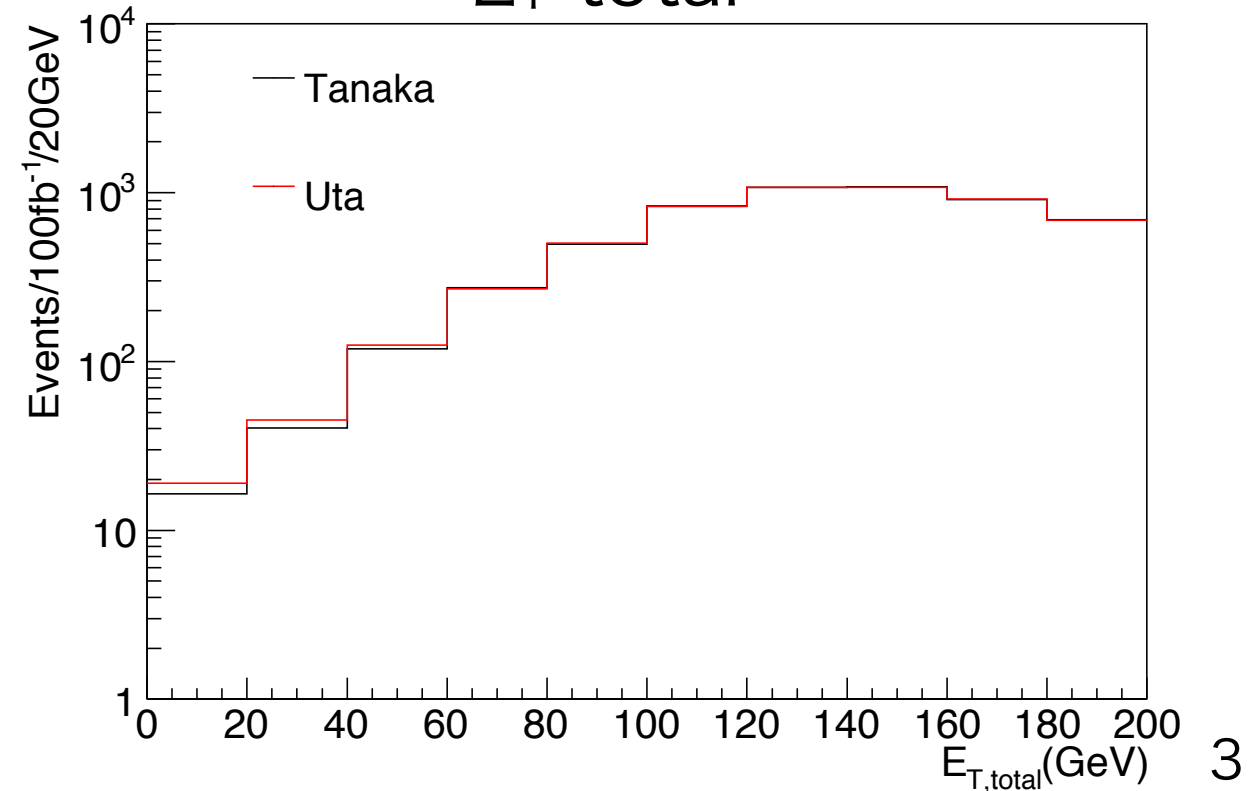
Number of b-jets



Number of jets

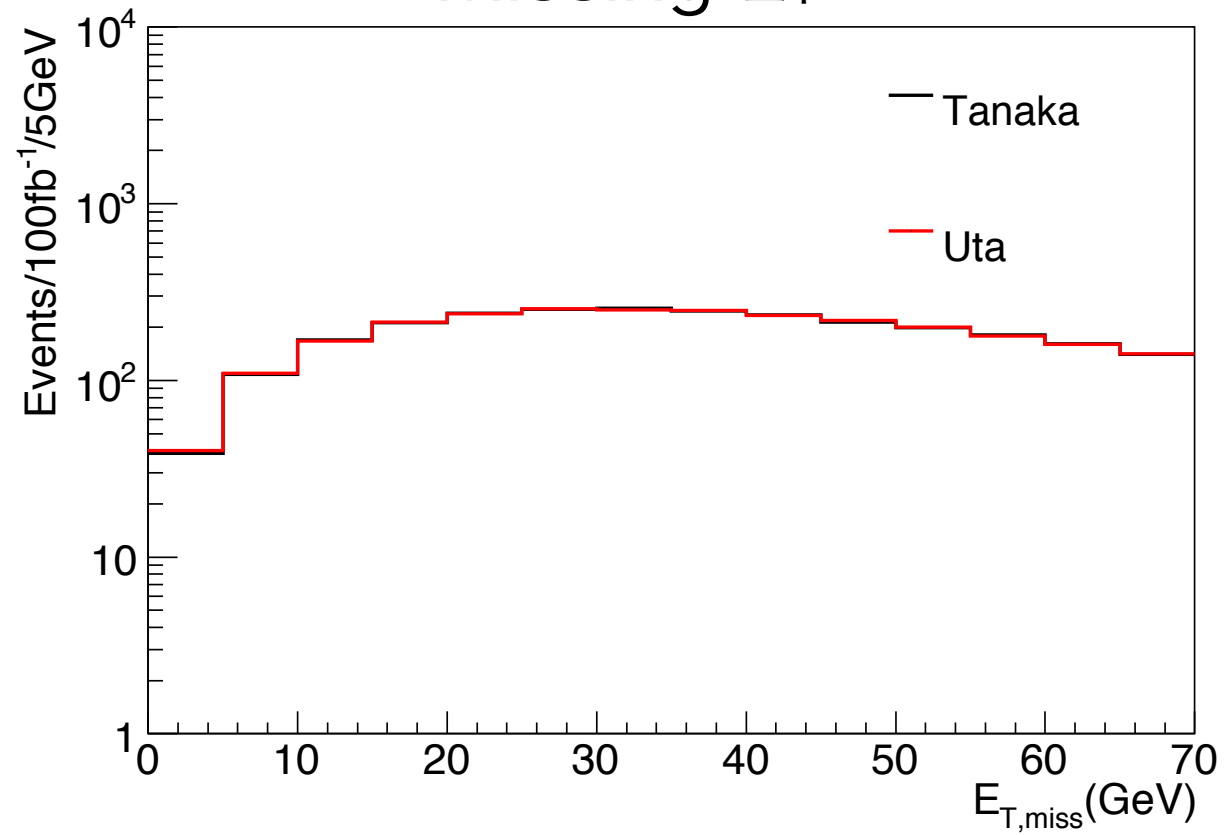


E_T total

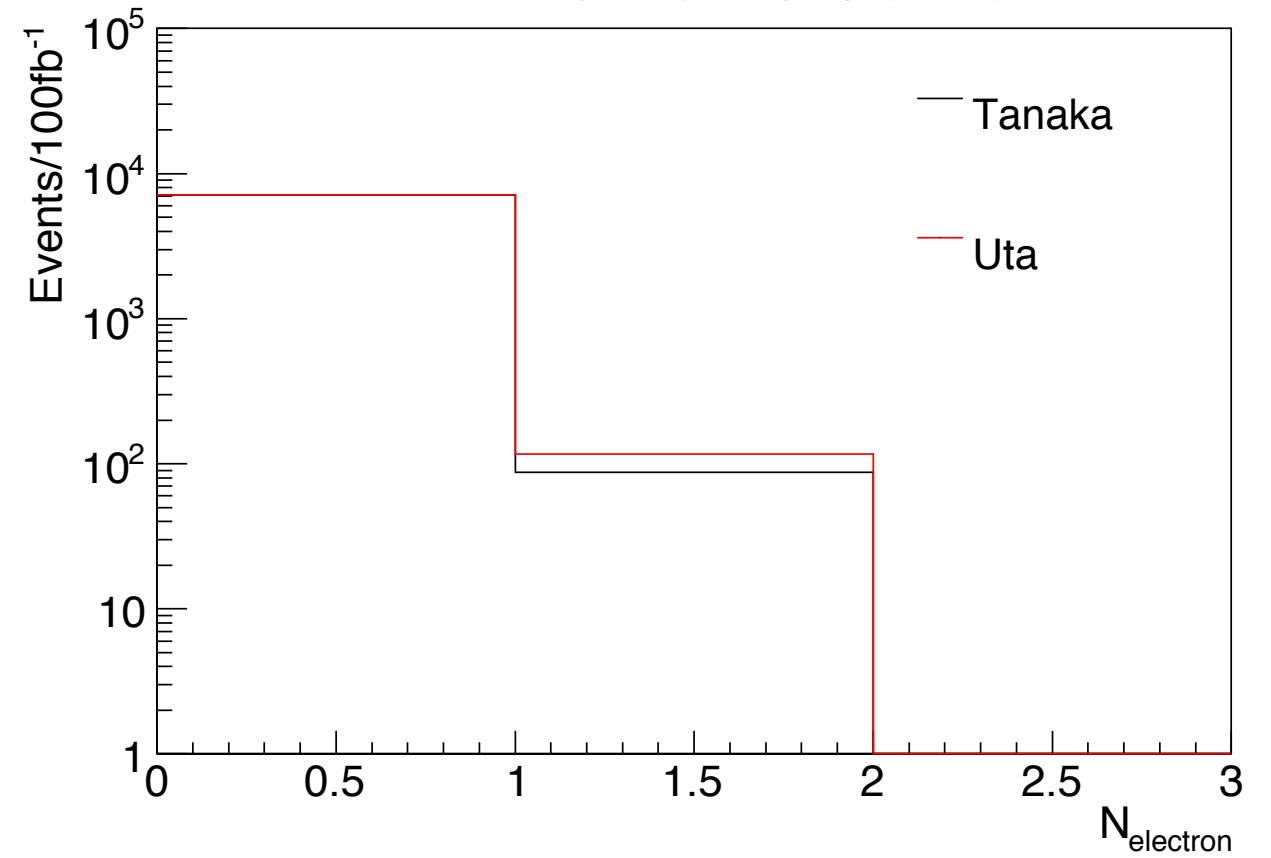


Each parameter

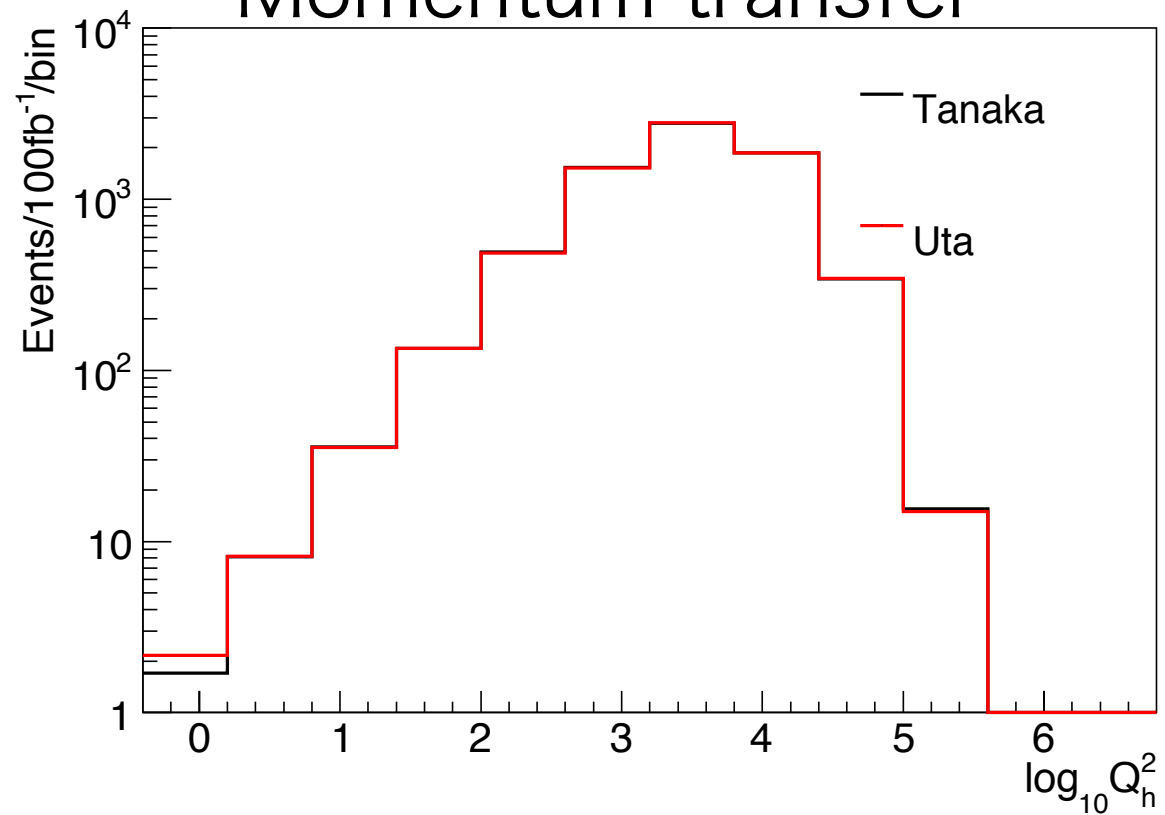
Missing E_T



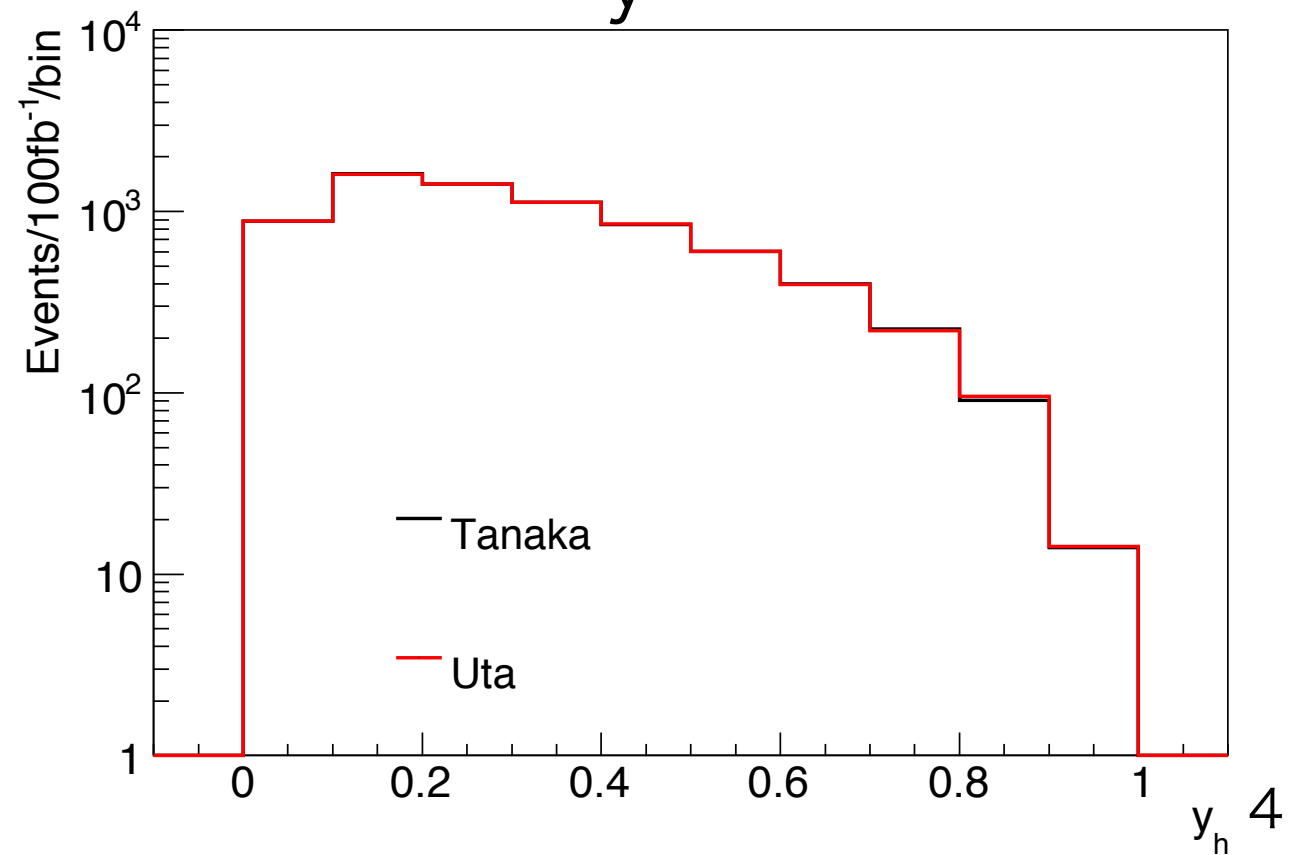
Number of electron



Momentum transfer

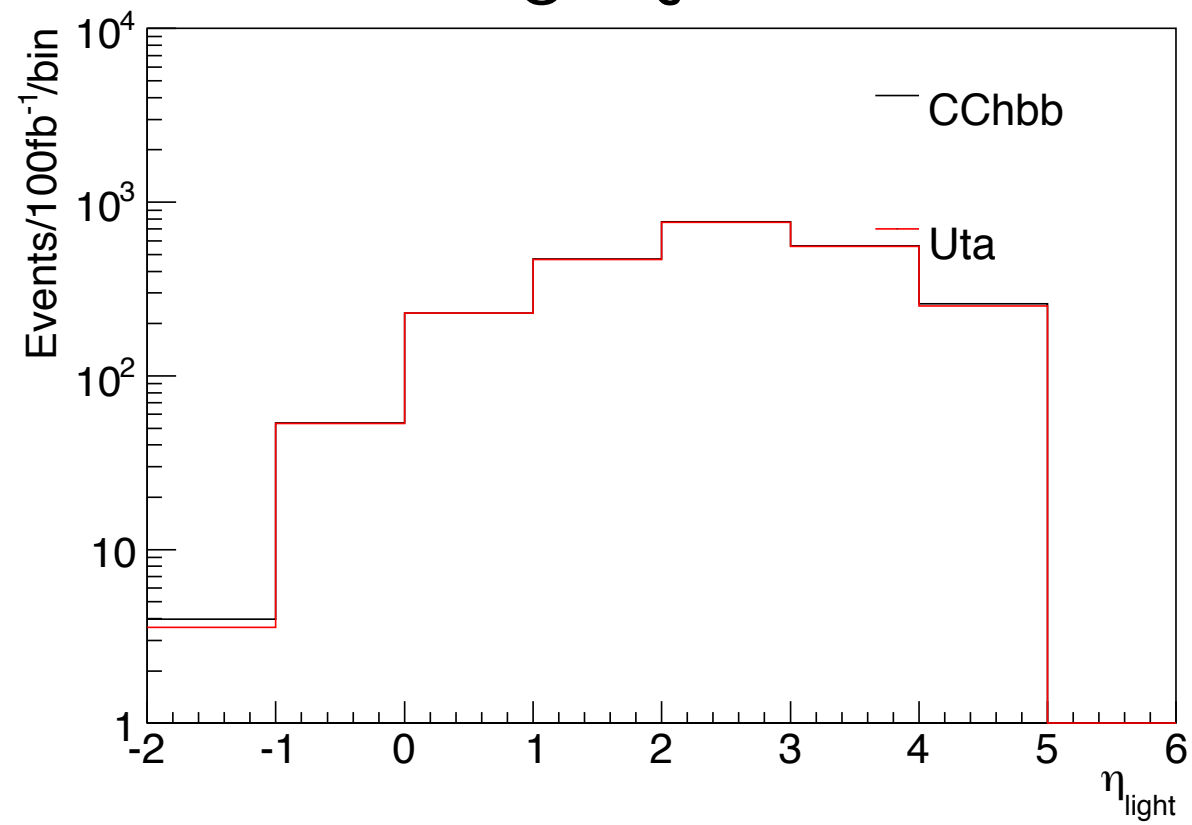


y

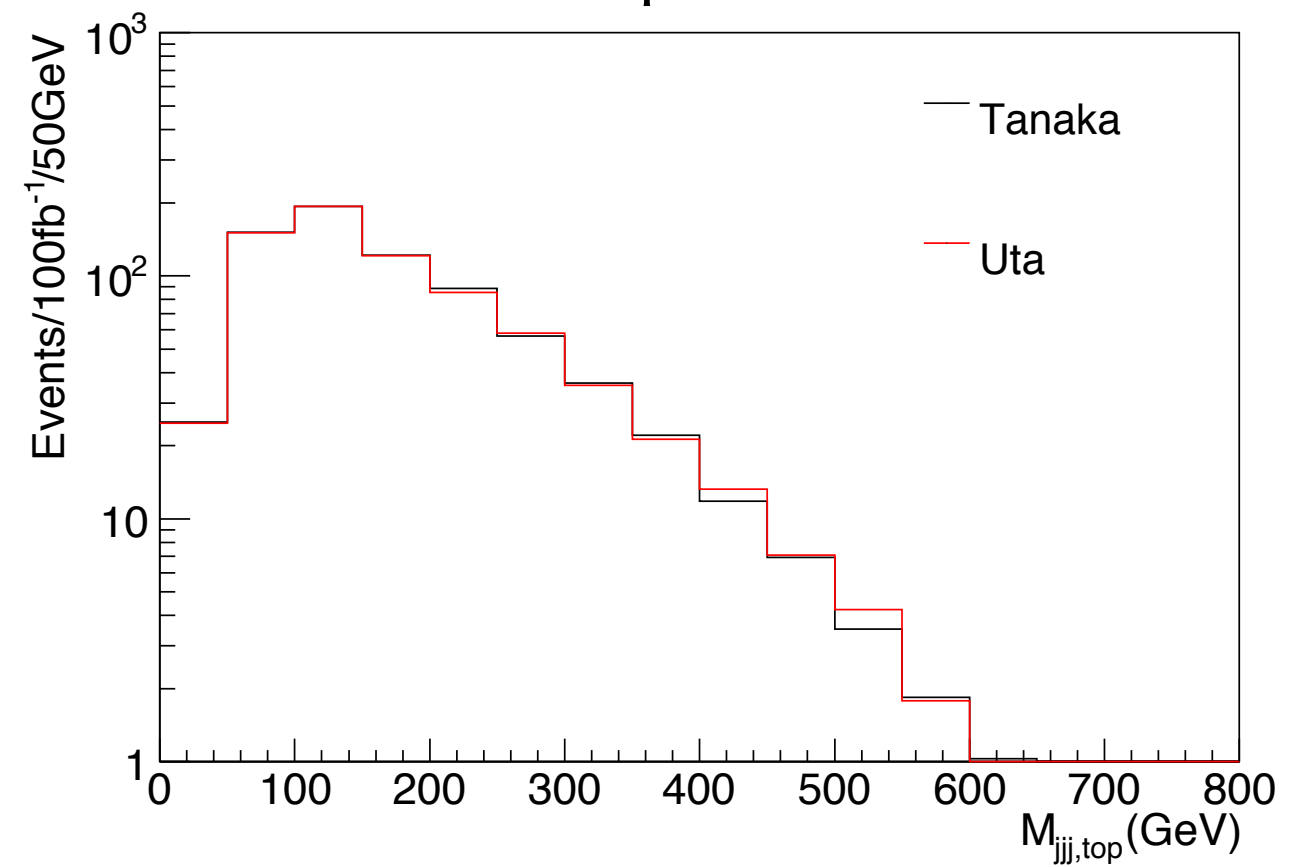


Each parameter

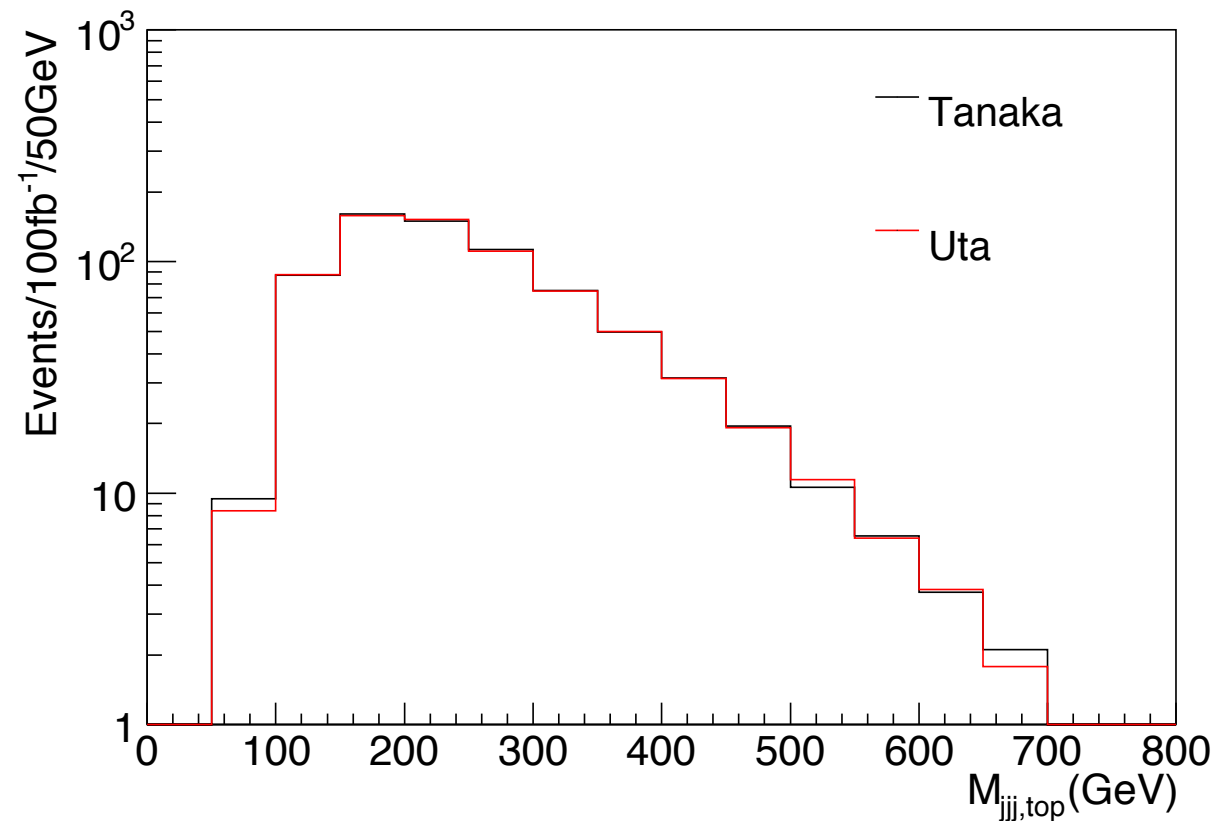
Light jet η



Top mass

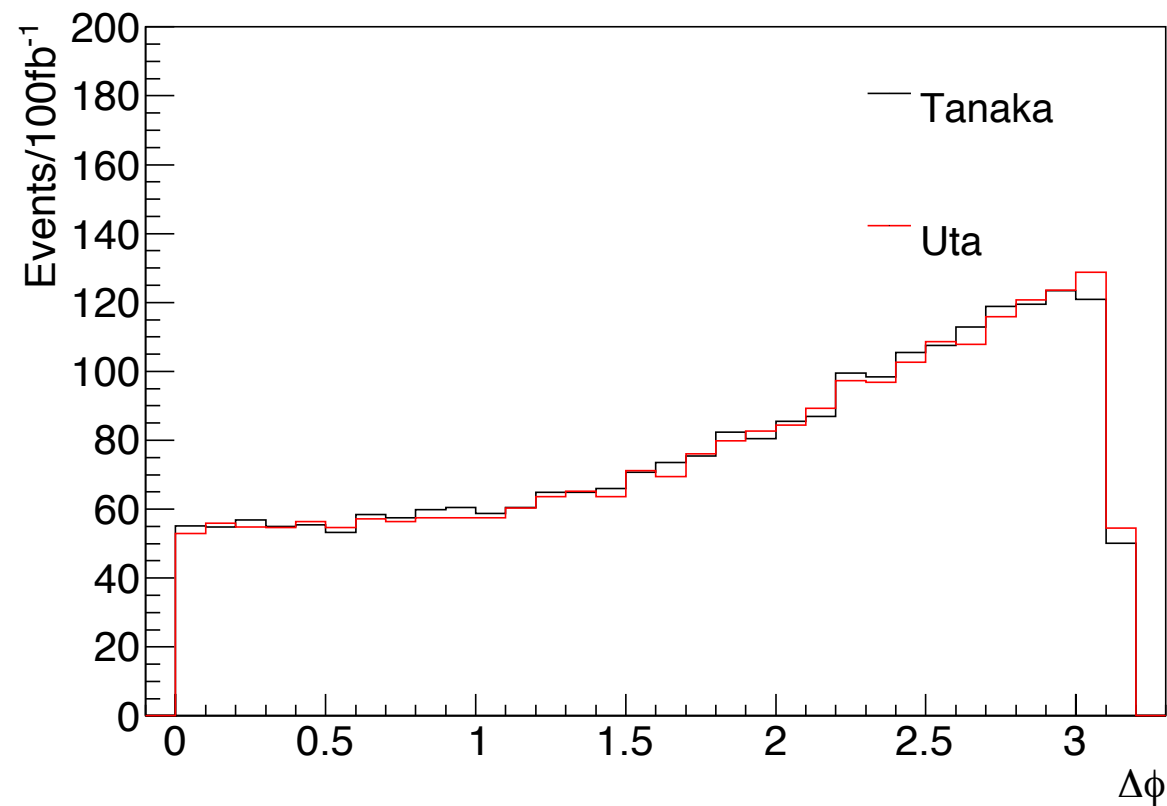


W mass

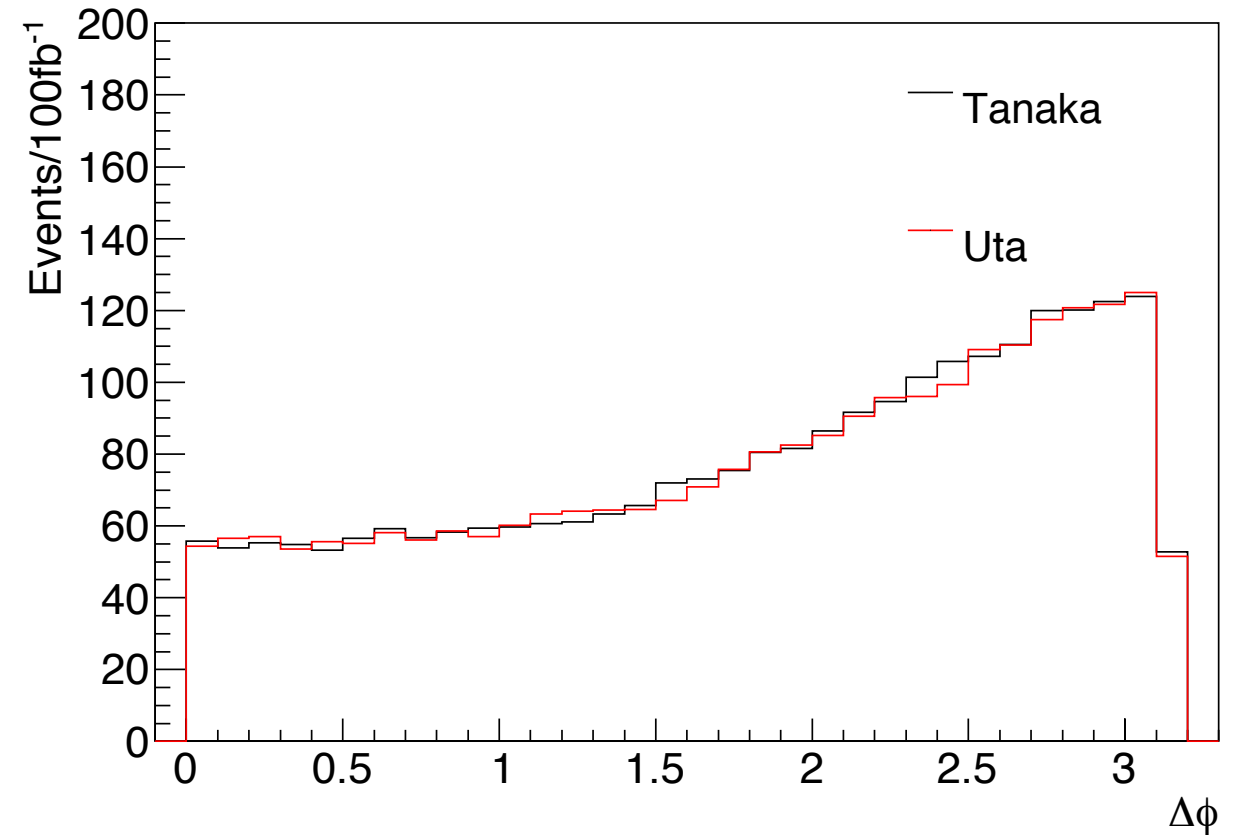


Each parameter

$\Delta\phi$ between
Missing E_T & Min η b-jet



$\Delta\phi$ between
Missing E_T & 2nd Min η b-jet



Conclusion and Next steps

- There seems to be No differences between two CChbb samples
- Other samples should be compared
- We should also compare each analysis macro

back up

Cut flow

- Analyzed by my macro

	CChbb(Tanaka)	CChbb(Uta)
PTj > 20 GeV Njet \geq 3, Nbjet \geq 2	1440	1433
missingET > 20 GeV	1229	1221
sumET > 100 GeV	1214	1207
Nelectron = 0	1210	1203
y < 0.9	1208	1201
$Q^2 > 400 \text{ GeV}^2$	1204	1196
light jet $\eta > 2$	972.7	966.5
W mass > 130 GeV	641.5	637.8
top mass > 250 GeV	454.6	448.8
delta-phi > 0.3	396.7	392.4
In signal region	303.5	301.9