



HIGGS SELF-COUPPLING ANALYSIS WITH $H \rightarrow WW^*$

Masakazu Kurata

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STATUS

○ Constructing kinematic fitter

- $ZHH \rightarrow (bb)(bb)(WW^*) \rightarrow (bb)(bb)(l \nu jj)$
- Try to compare the result between signal and ZZH
- Need to use likelihood ratio?

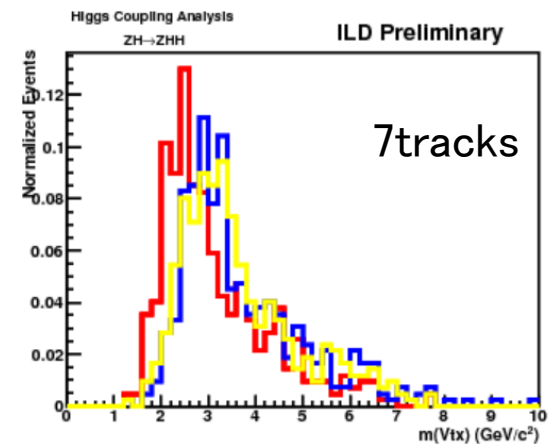
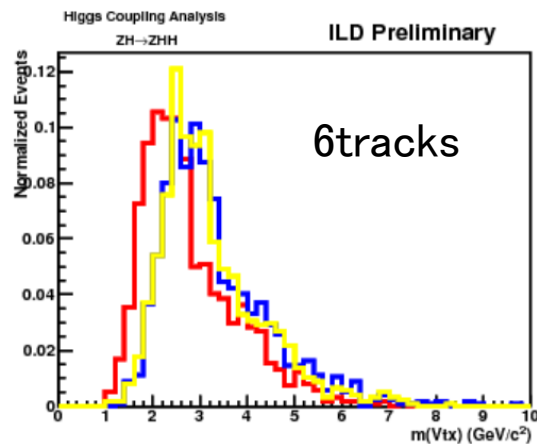
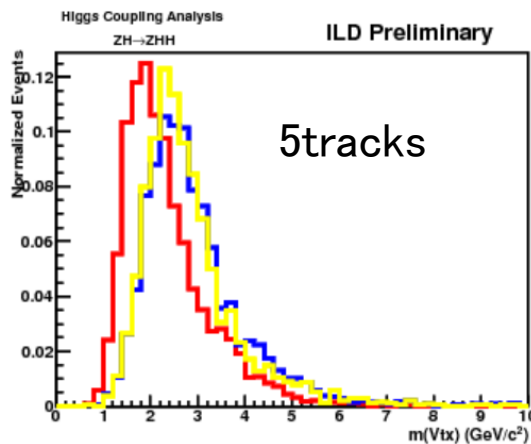
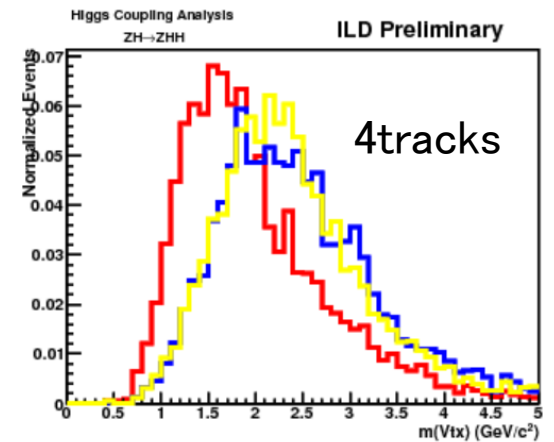
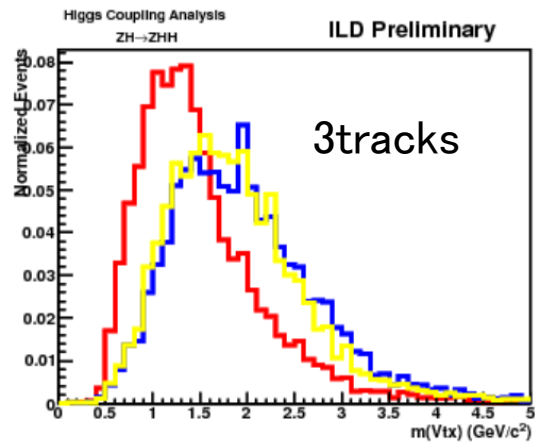
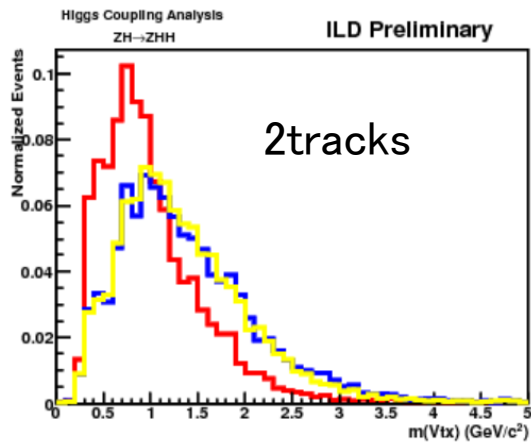
○ Study in LCFIPlus

- Optimize various parameters for all the vertex patterns(1vtx, 2vtx)
- There are some problems, so investigating them
- start to check using ttbar b jets
- Takes some time to obtain some results

○ Vertex charge study

- Check for 1vtx & 2vtx case
- Playing LCFIPlus changing some parameters and see what happens...

2VTX- SECONDARY VERTICES



Reco

Pi0&attach perfect

Pi0reco&vertex finder