

Event selection

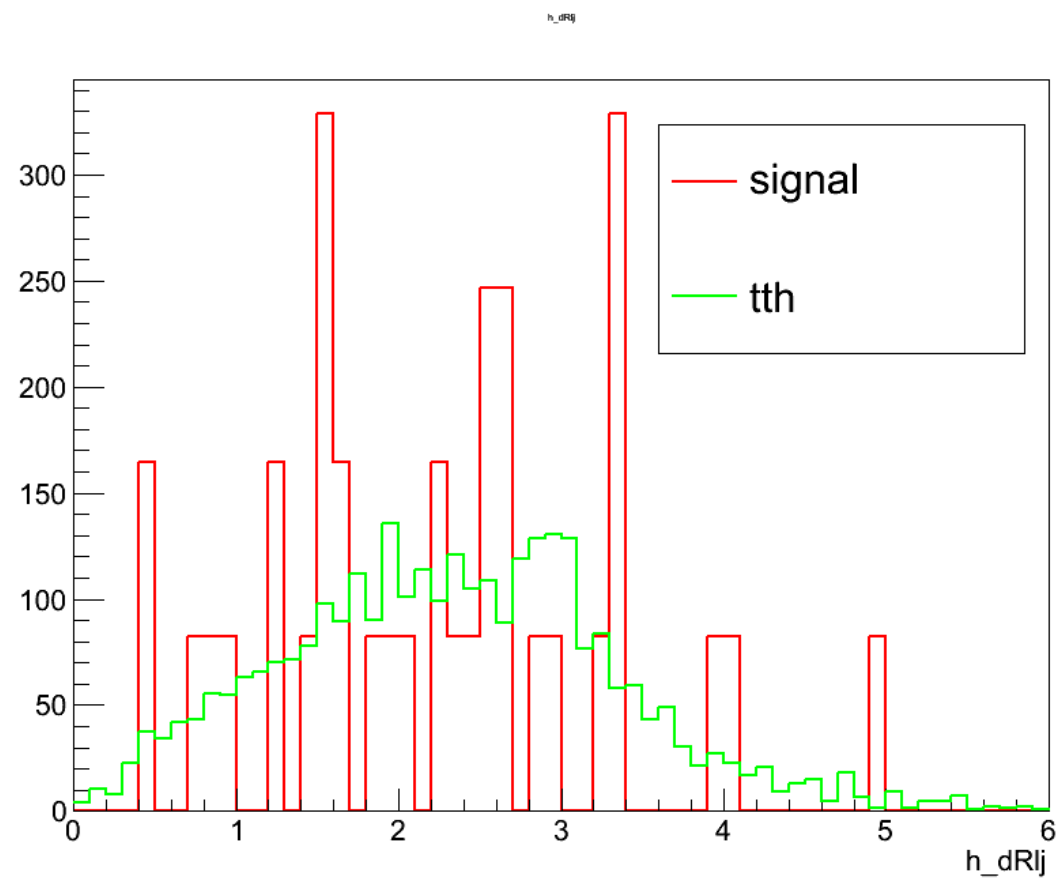
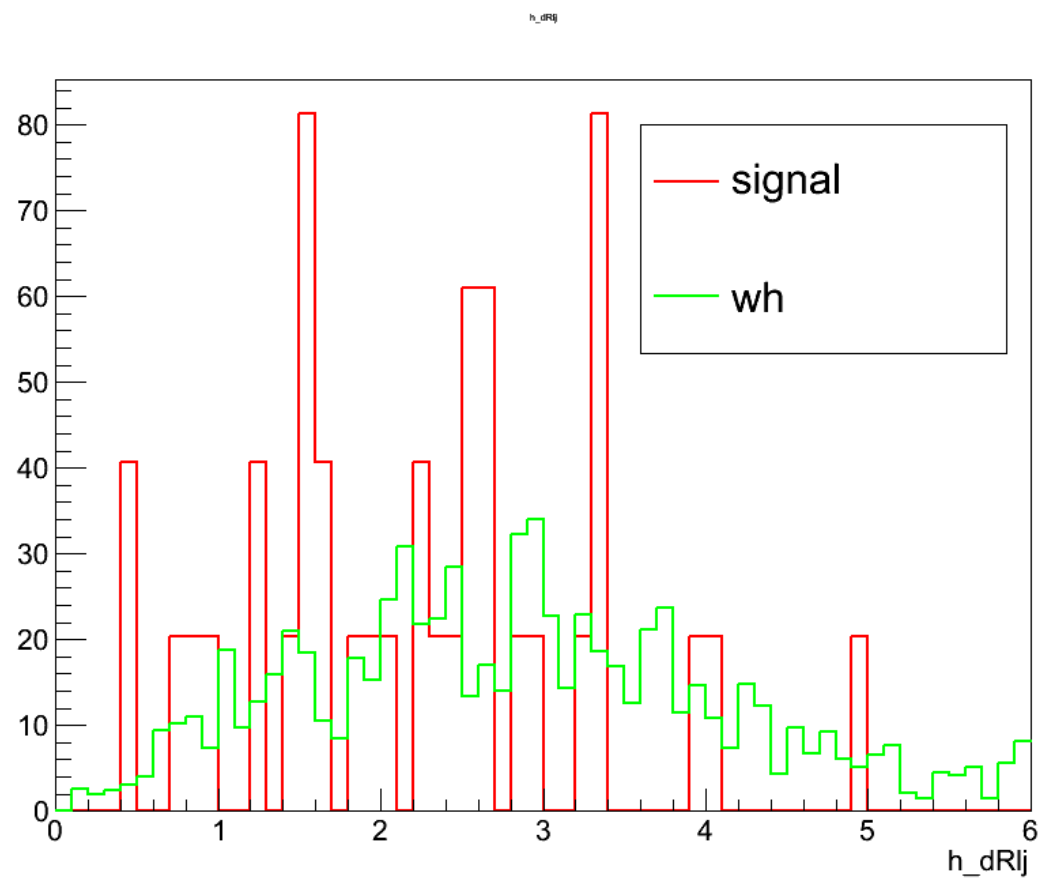
- The same selection to $\gamma\gamma$ higgs as in HSG1
- At least 2 jets, 1 lepton and $\text{MET} > 25$
- Divide into 2 categories
 - on shell W hardronic decay off shell W leptonic
 - off shell W hardronic decay on shell W leptonic
- Require W mass from 50 to 110 still
- tth and vh are dominating background after these cuts



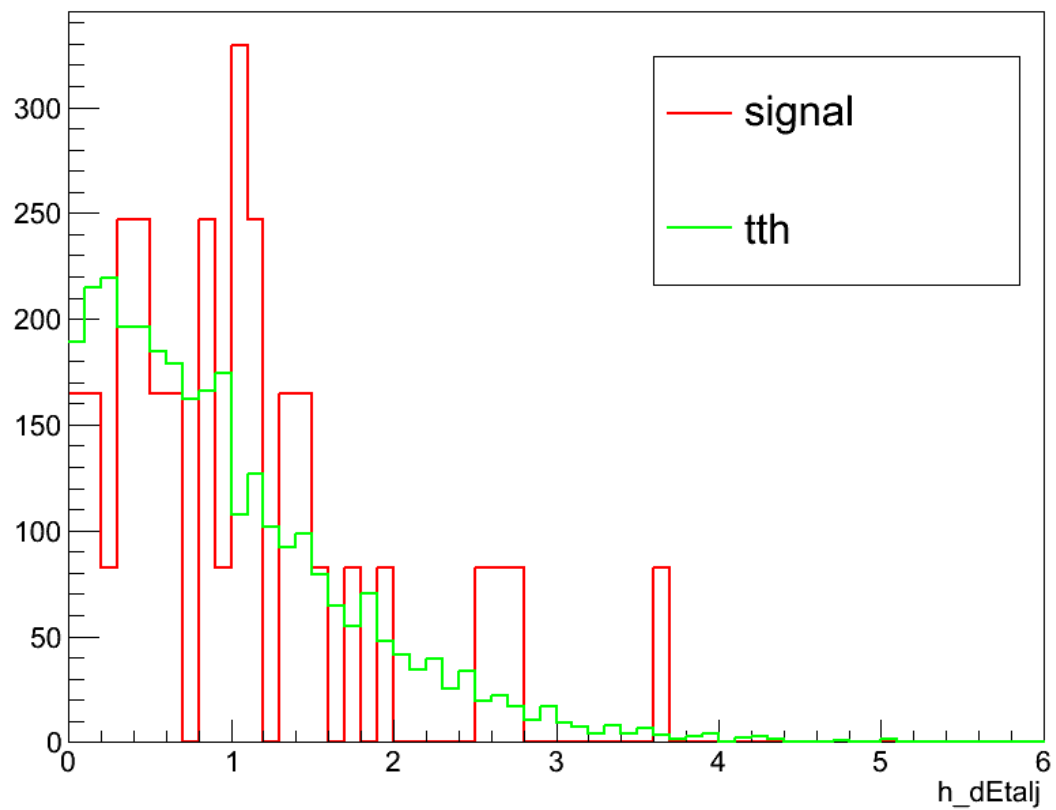
Back ground

- Standard model VH
- Standard model ttH

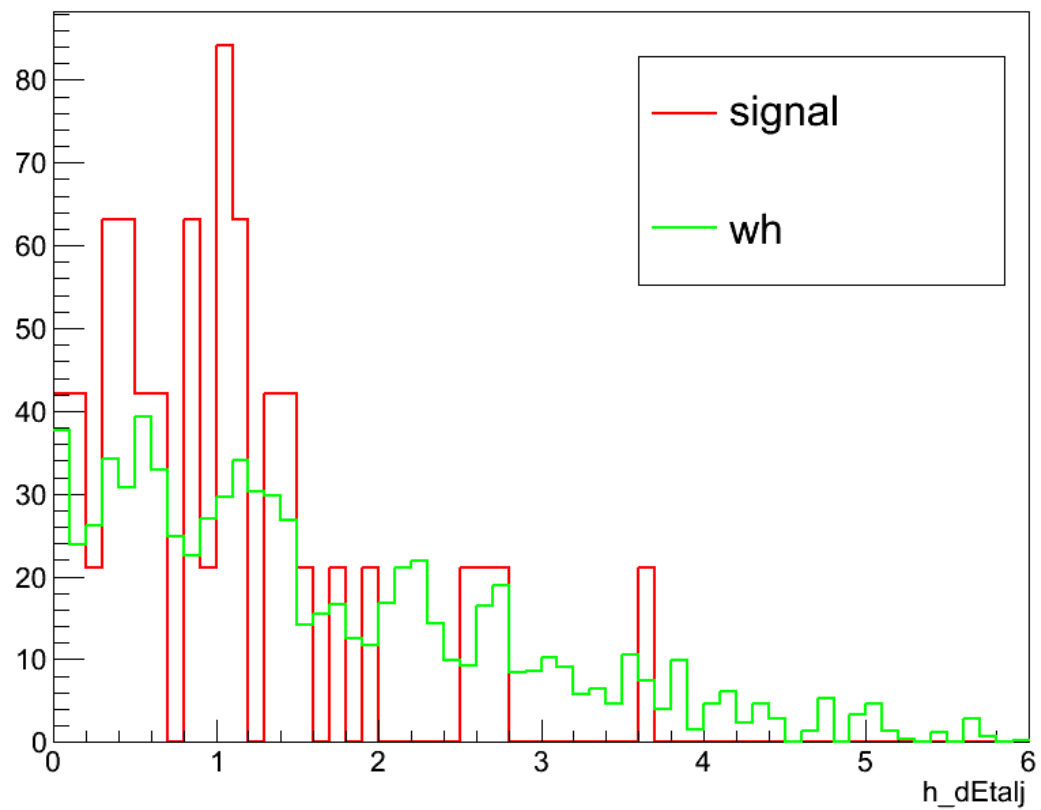
The signal sample is not enough at this moment



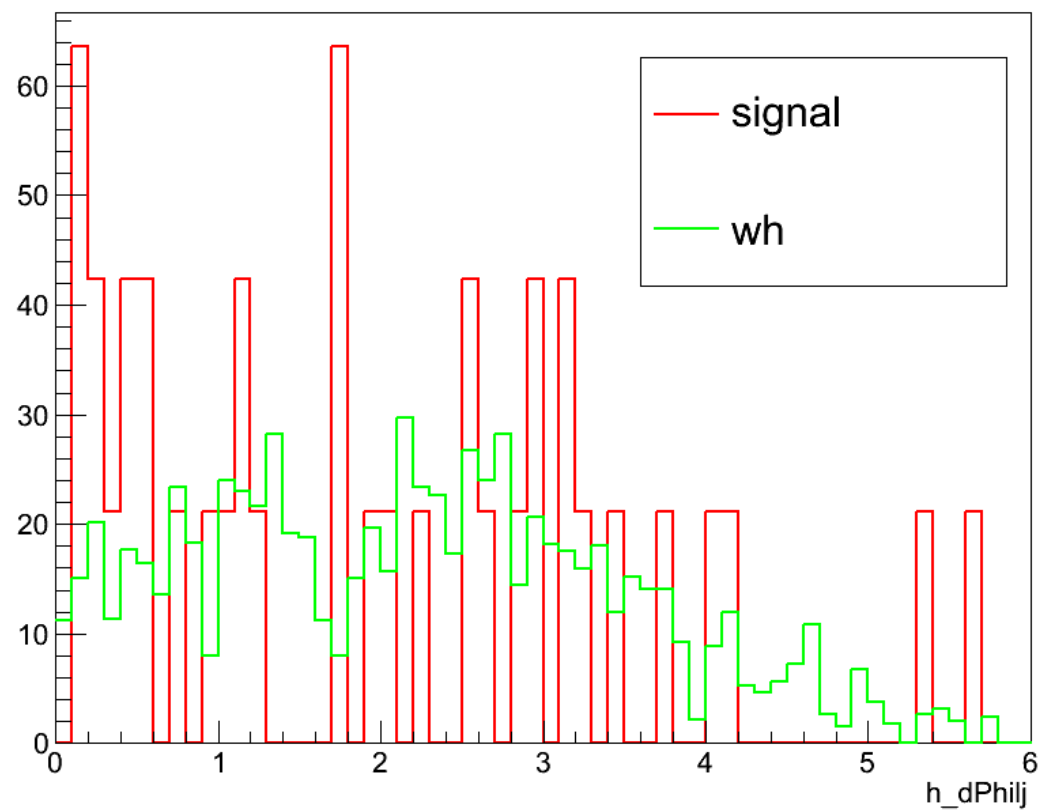
$h_d E_{Tlj}$



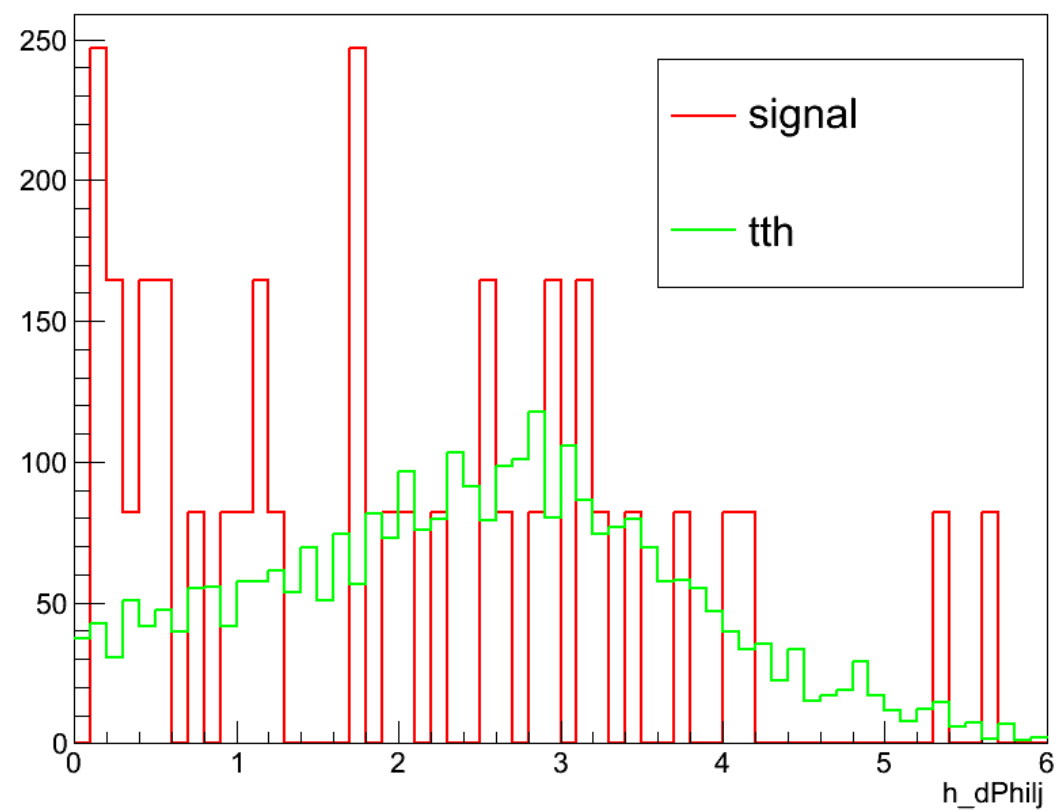
$h_d E_{Tlj}$



$h_d\Phi_{Hj}$



$h_d\Phi_{Hj}$



Where are we now?

- Central production will be done in this week
- Dumper is done
- Data is downloading, hope it could be done this week?