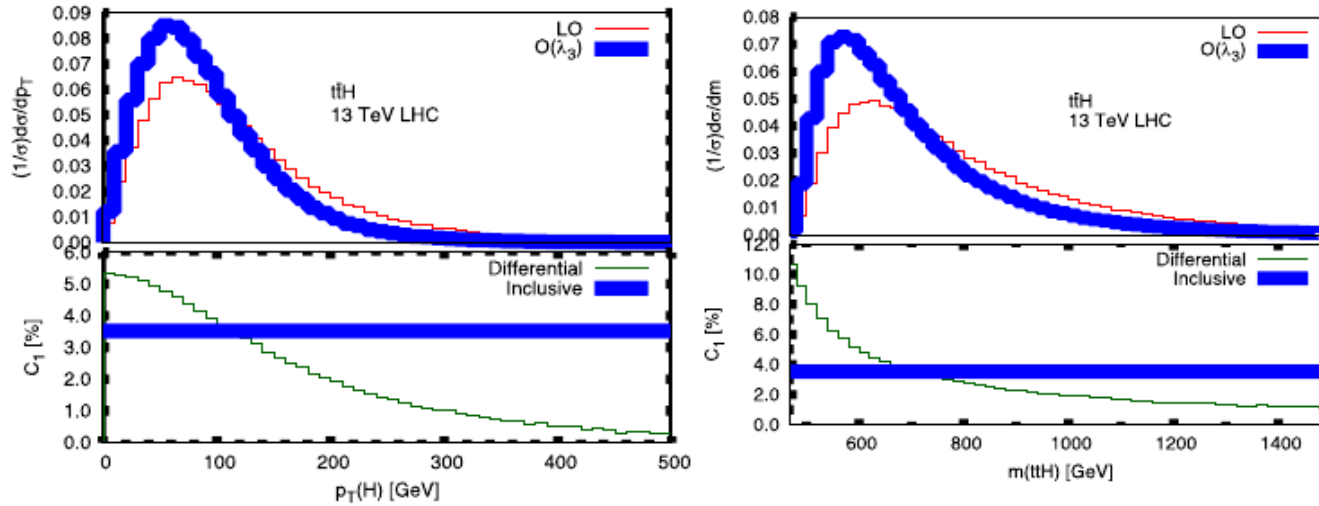


- **Bins along which variable ?** $m(ttH)$ slightly more sensitive than p_{TH} , but requires to define tops at truth level \Rightarrow use p_{TH}



- **Which bins ?** Harmonize with $gg \rightarrow H$ to allow bin merging, so boundaries at 0, 60, 120 and 200 GeV. Possible scenarios:

Option 1	0-60	60-120	120-200	200-300	300-400	400-
Option 2	0-60	60-120	120-200	200-350	350-	

gg → H

- Contributions from $H \rightarrow \gamma\gamma/ZZ/WW$ in (200, 400) GeV, $H \rightarrow bb$ above
- Possible p_{TH} splits:**

Option 1	200- 250	250-300	300-400	400-500	500-650	⋮	650-
Option 2	200- 250	250-300	300-450		450-650	⋮	650-

- N_{jet} splits for $p_{TH} > 200$ GeV bins**

- split $N_{jets} \leq 1$ and $N_{jets} \geq 2$
- Could help reduce VBF/VH cross-feed
- Jet p_T cut should increase with p_{TH}
 - $p_{TJ} \geq r * p_{TH}$ ($r \sim 0.2$) ?
 - $p_{TJ} \geq r * m(Hj)$?

