

# status

Yu Zhang

04.04

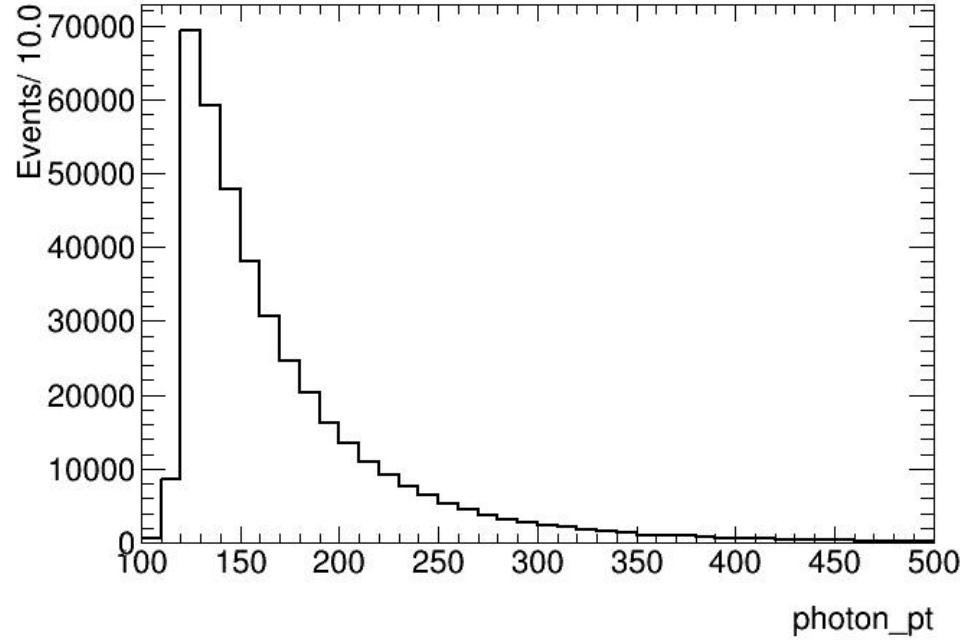
# resolved Z(qq) $\gamma$

- EXOT6
  - Trigger:HLT\_g120\_loose
  - GRL(some data samples don't have CollectionTree, but they are not in GRL), Detector Quality, PV
 

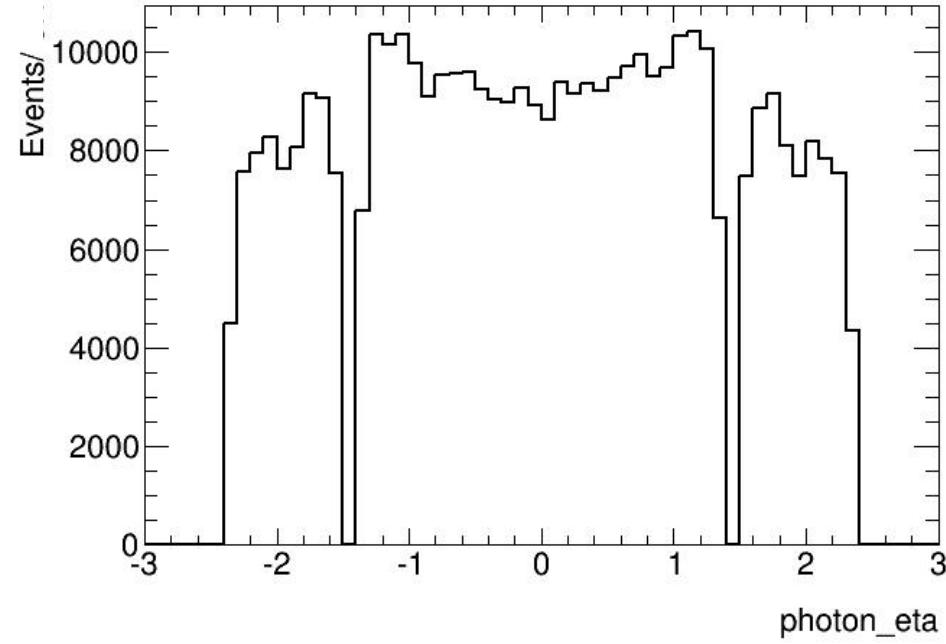
**BUGS with MC!!!**
  - Photons:
    - calibration, IsoCorrection      **401150 events remaining in data**
    - Author, OQ, Ambiguity
    - $pT > 100\text{GeV}, |\eta| < 2.37$ , exclude crack region
    - TruthMatch
      - ✓ match with a photon not from hadron
    - Isolation
      - ✓  $\text{topoetcone40} < 0.022 * \text{Et} + 2.45$
    - Tight
  - Jets
    - calibration
    - $pT > 50\text{GeV}, |\eta| < 4.4$
    - $\text{JVT} > 0.64$
  - [OverlapRemoval](#)
- .....
- |   |
|---|
| $\text{Photon}$<br>$\text{pt, eta, phi, e, topoetcone40,}$<br>$\text{ptcone20}$<br>$\text{isTight}$ |
| $\text{Jet}$<br>$\text{pt, eta, phi, e}$<br>$\text{JVT}$  |

# kinematics

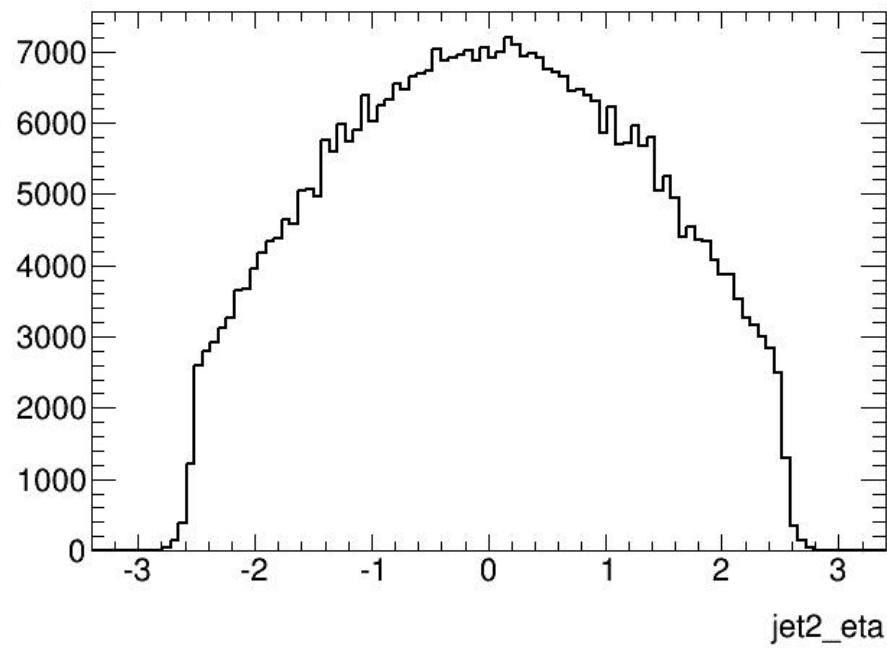
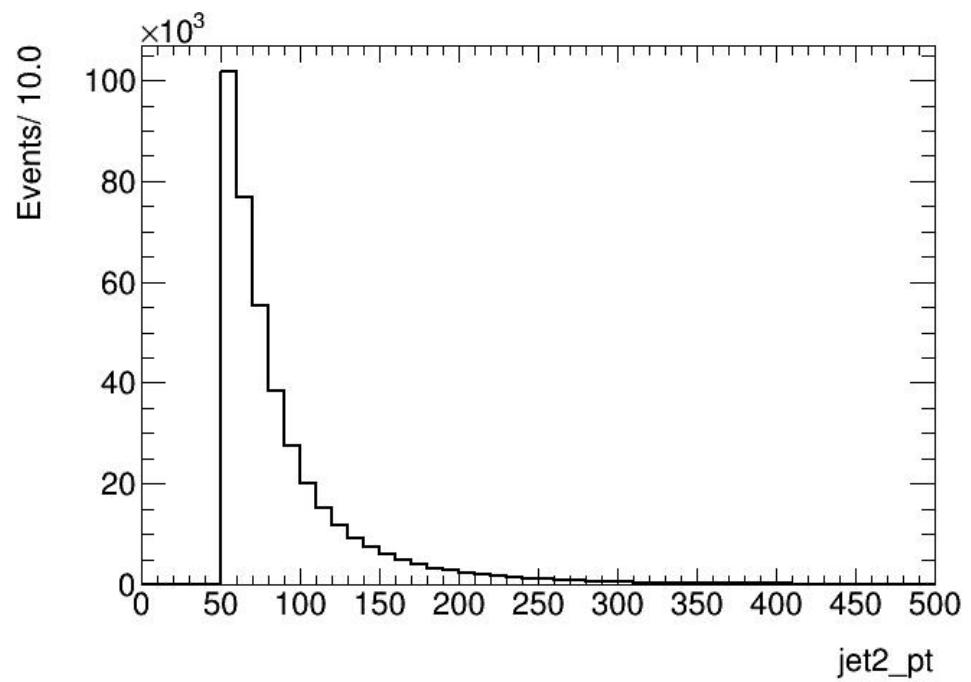
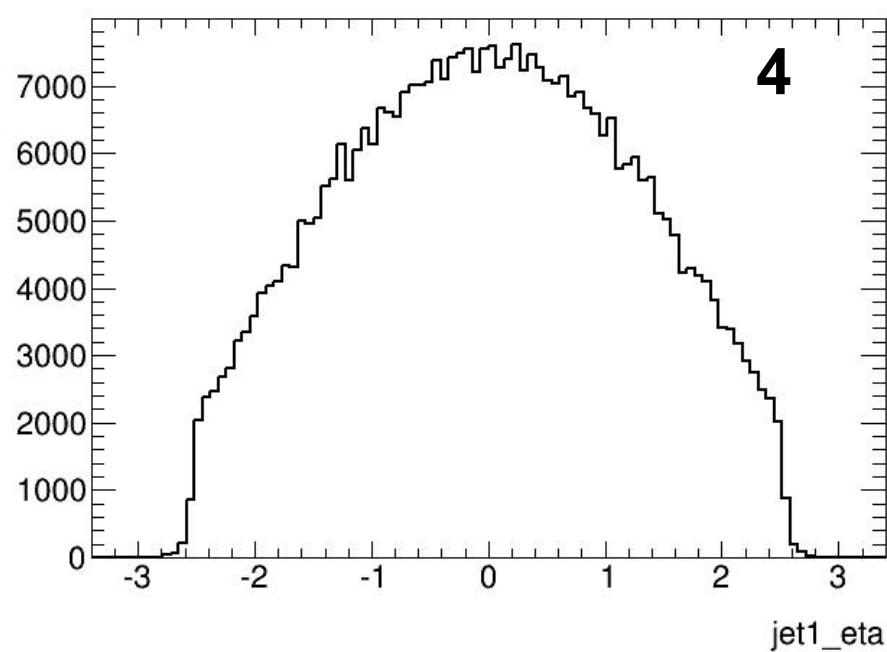
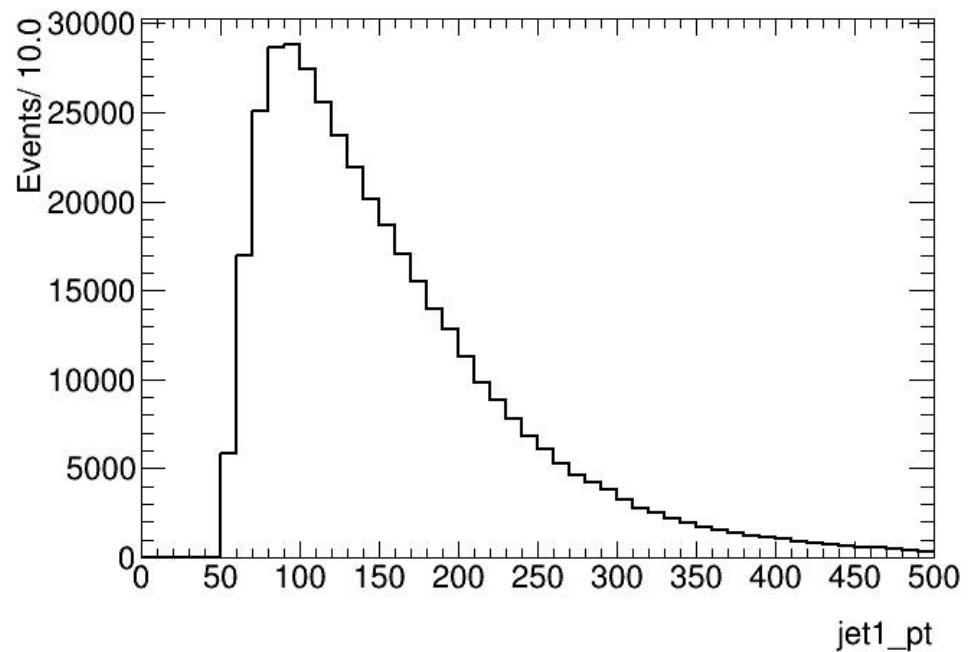
3

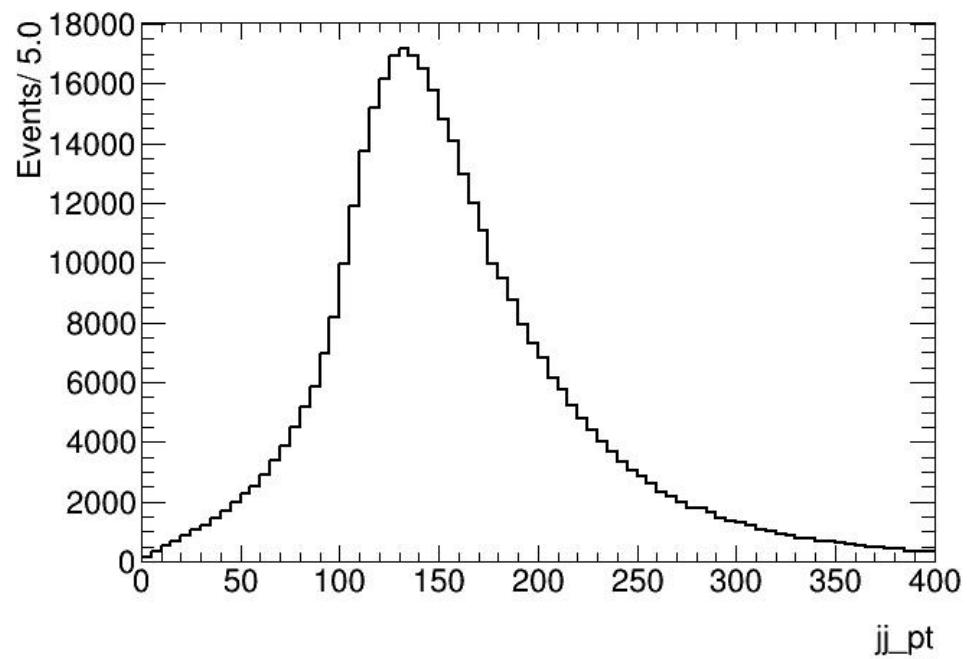
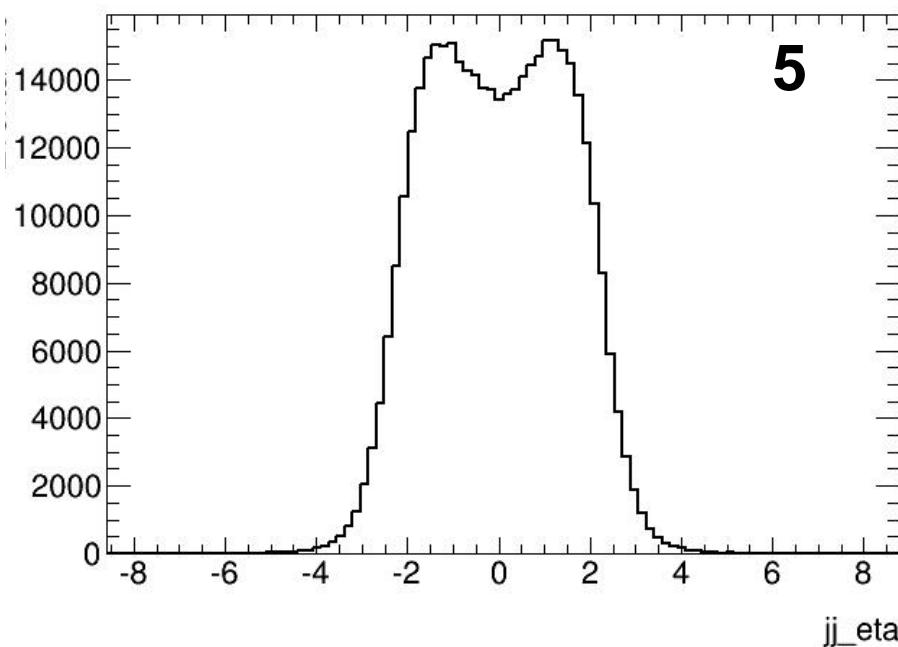
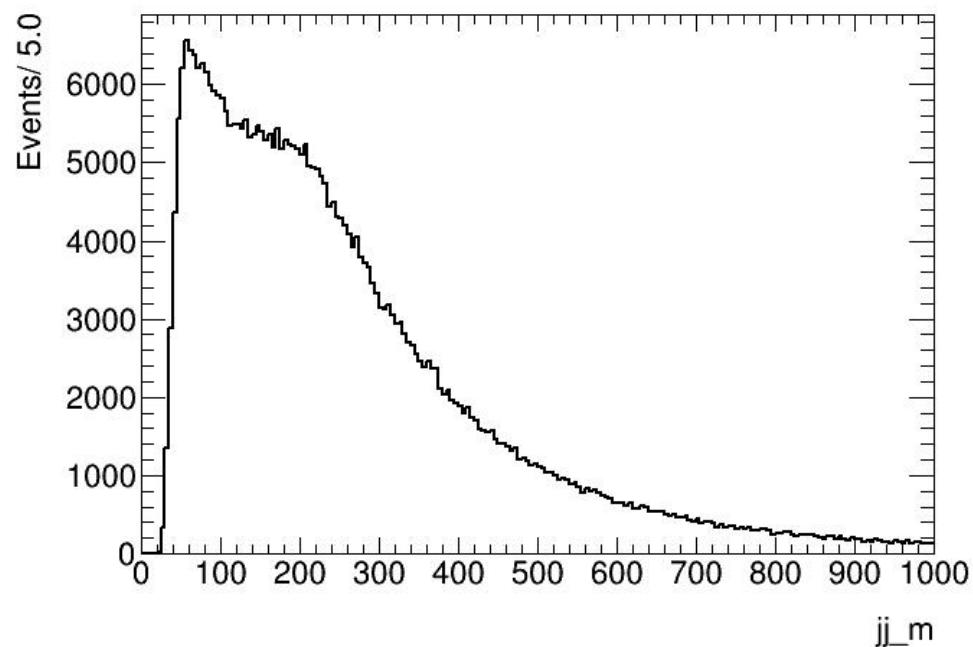


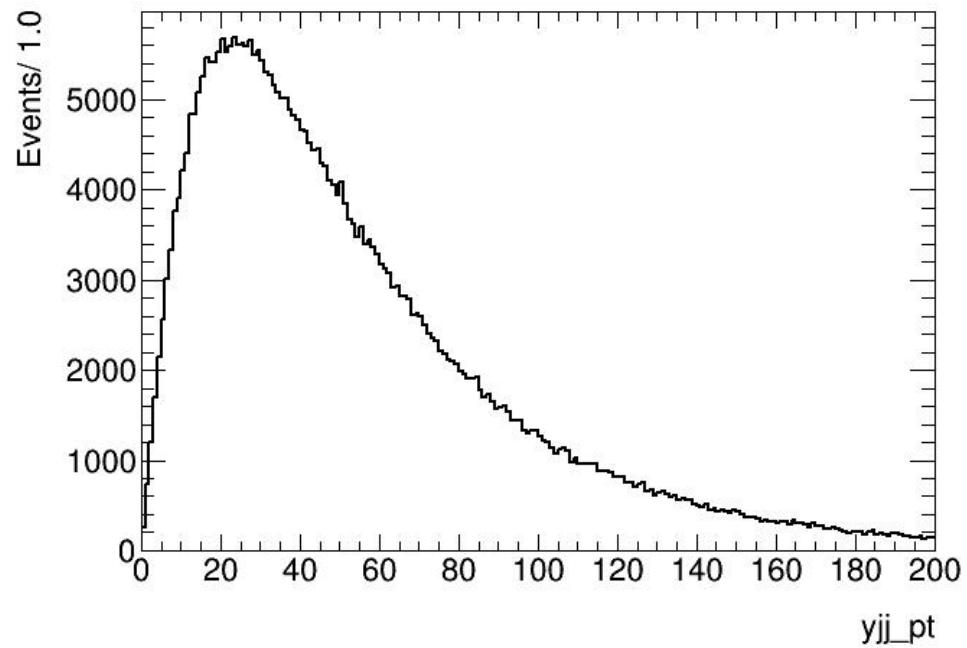
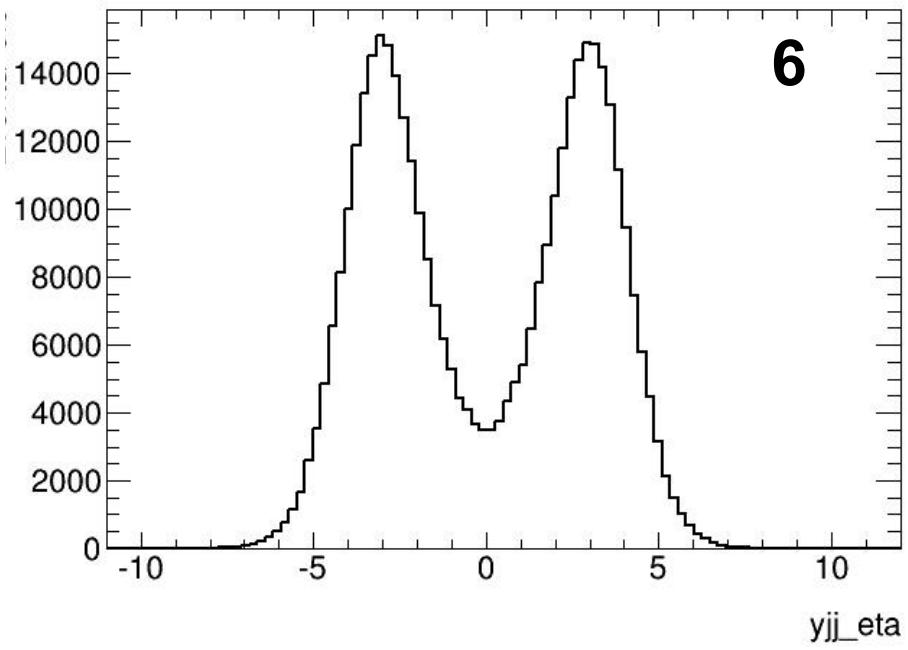
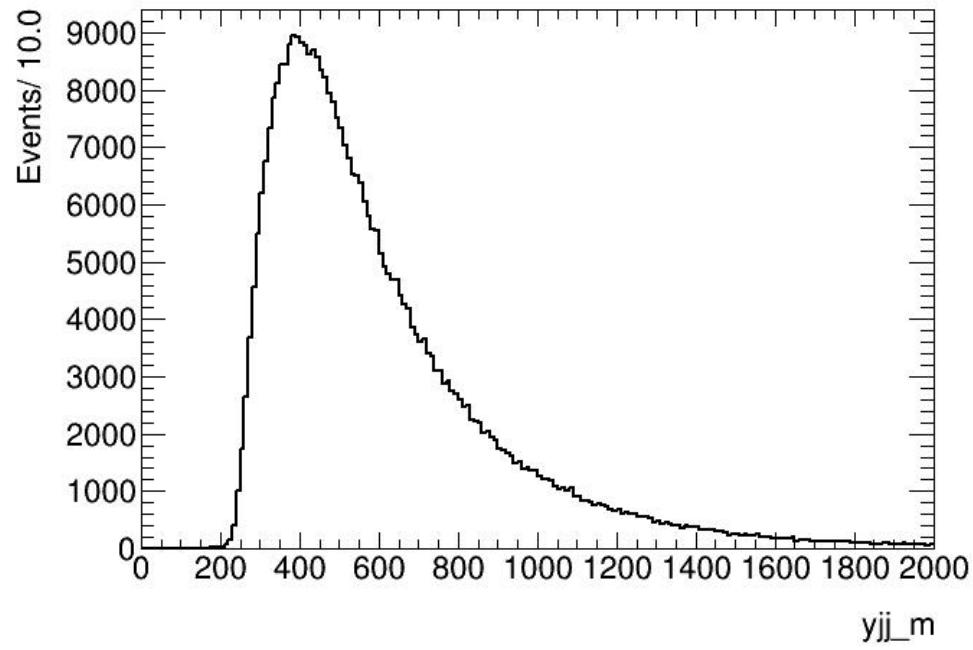
photon\_pt

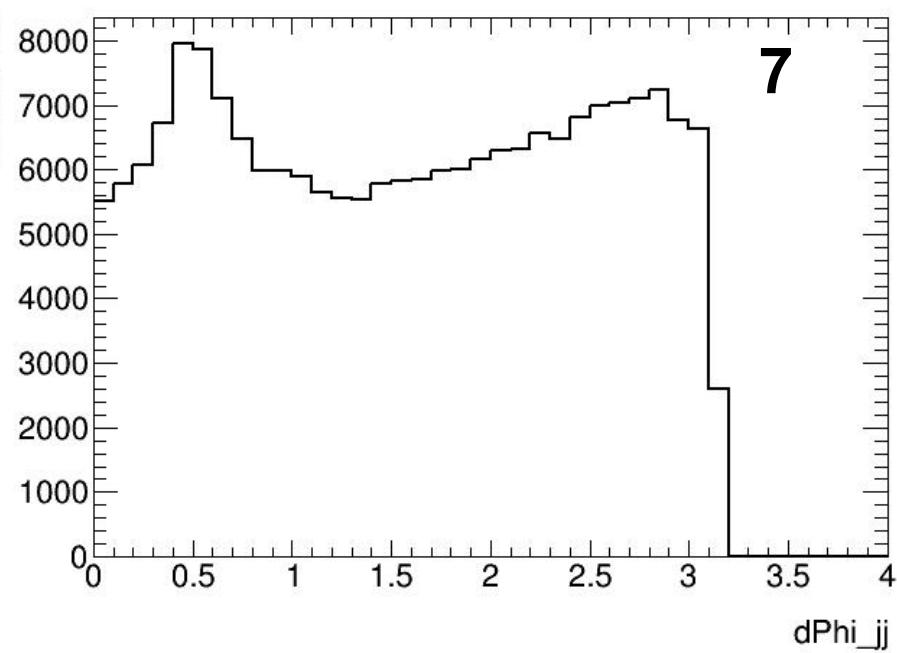
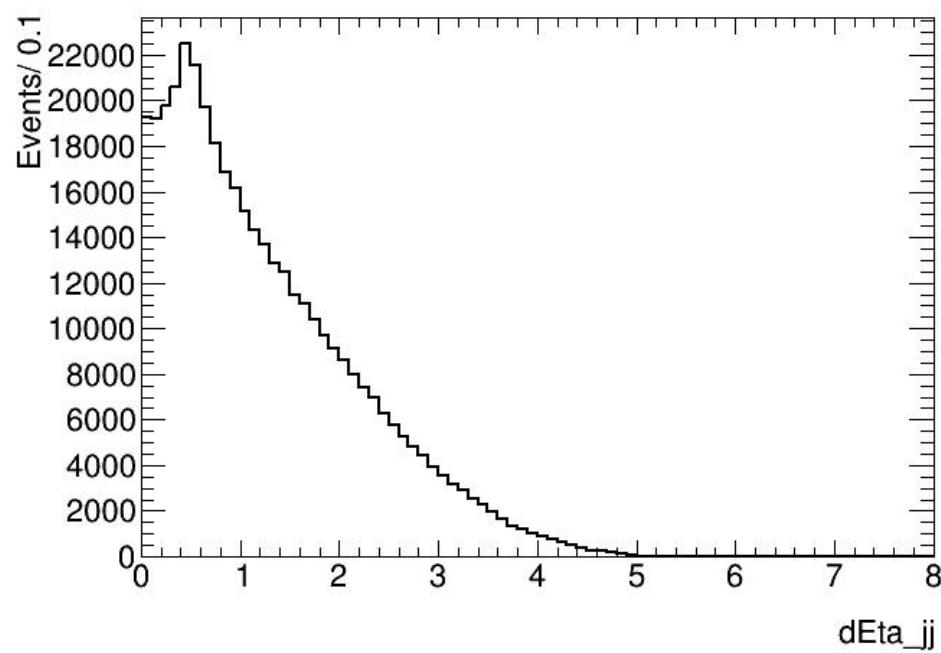


photon\_eta

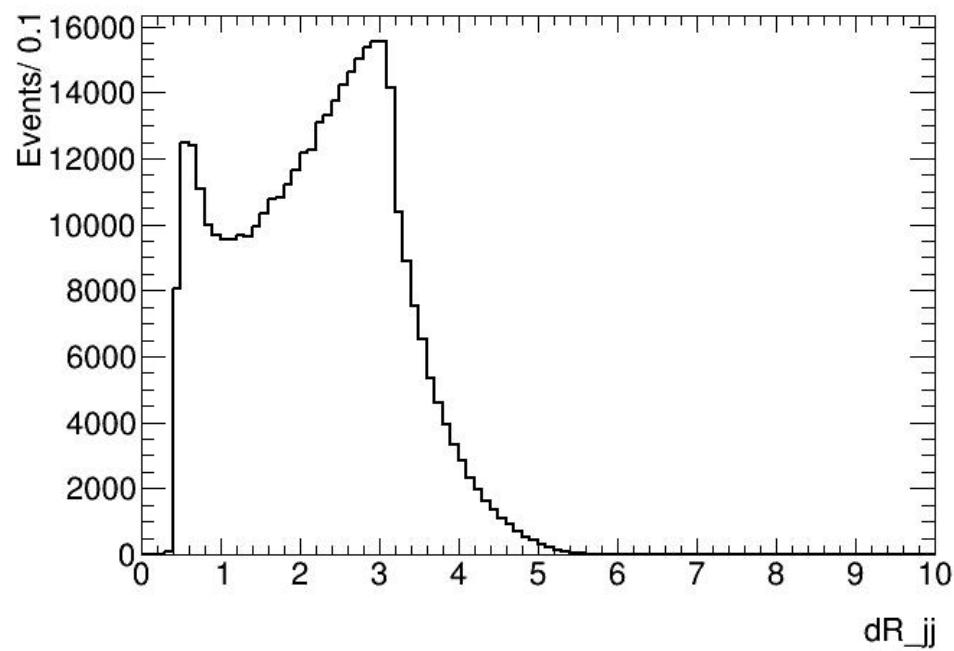


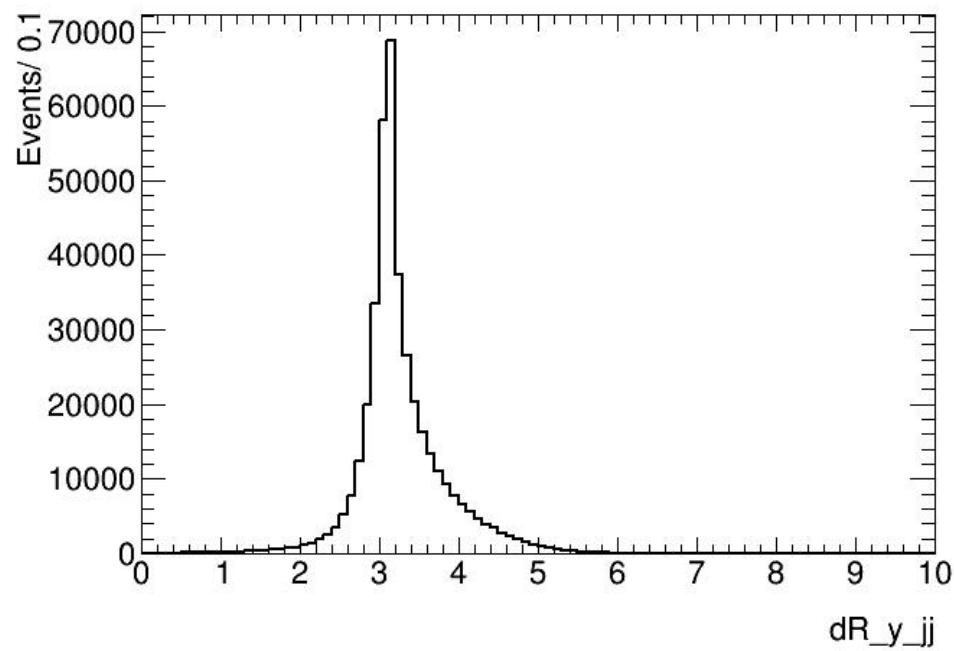
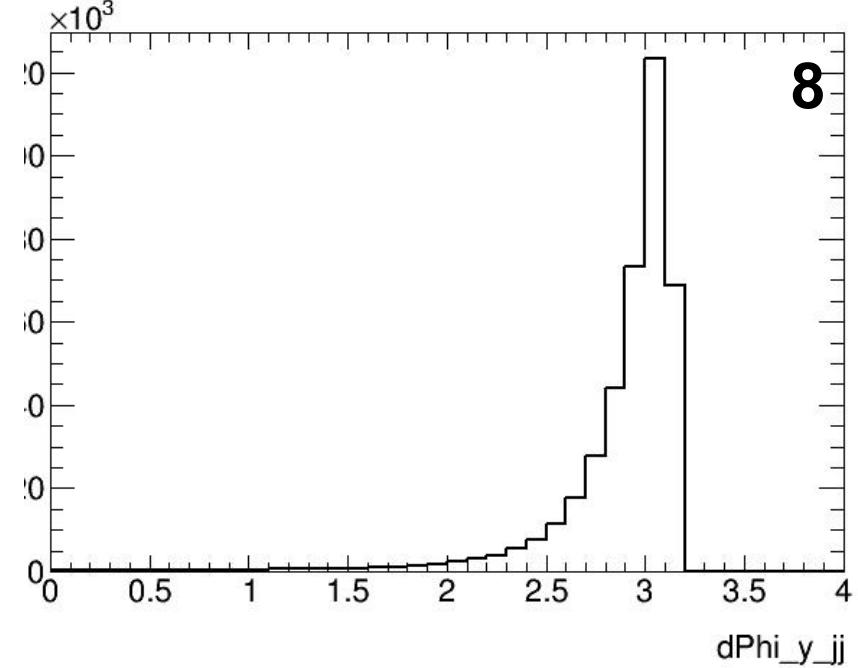
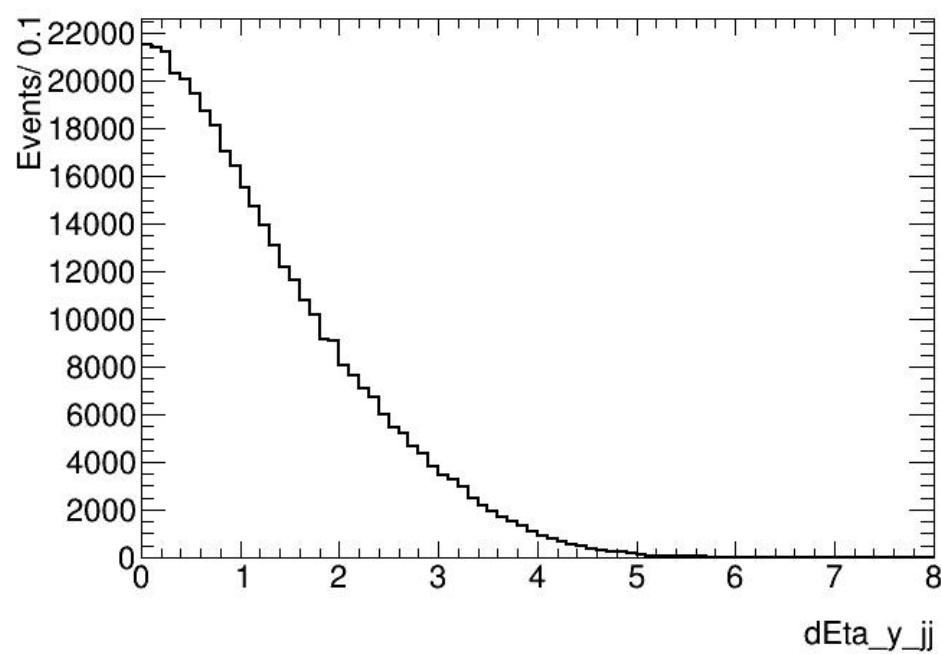






7





# to do list

- High Mass diphoton
  - combine the control region
- Zgam
  - fix the bug
- VBF
  - systematic?
- Qualification