

Work Status

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- ⊙ already generated 5K events: $p p \rightarrow l \nu j j a a$
- ⊙ ExRootAnalysis, got some problems...

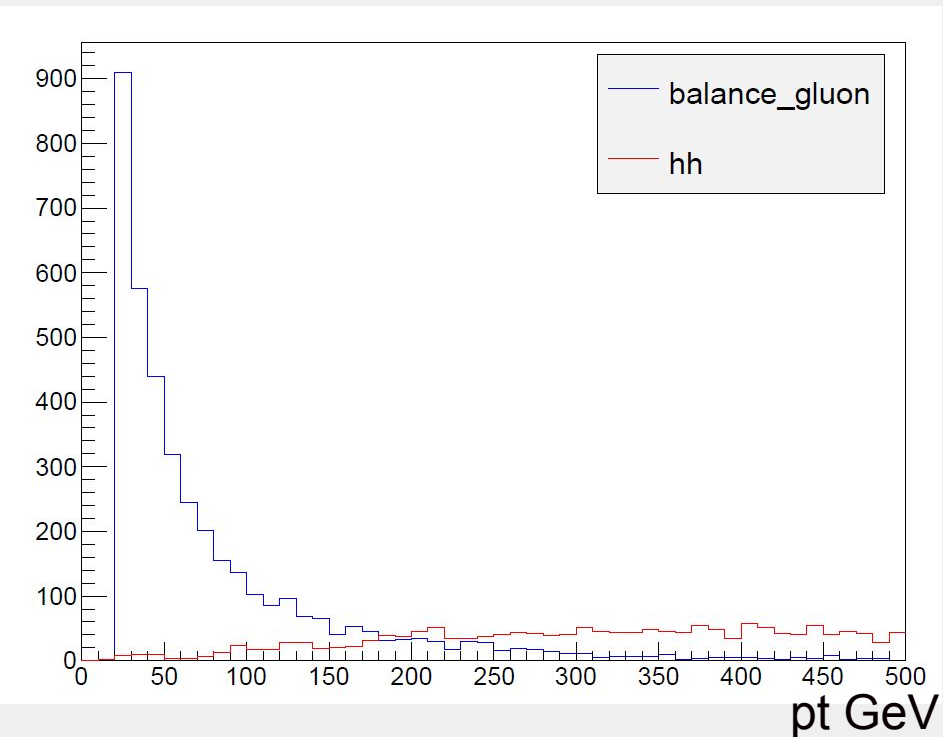
balance gluon

- look for balance jet of hh in sm nonresonant hh sample
- only have a look at gluon fusion production, $g g \rightarrow h h$
- for now, very inaccurate method. choose events in which:

$\Delta\Phi(\text{gluon}, hh) \sim \pi$; $\text{Eta}(\text{gluon}) * \text{Eta}(hh) < 0$; $\text{pt}(\text{gluon}) > 20 \text{ GeV}$

3955/48503 $\sim 8\%$ pass

plot pt of leading_gluon and hh



summary&to do

- ⦿ fix ExRootAnalysis bug, plot some import variables for bkg sample
- ⦿ use truth information to check if there is balance jet for hh: event chain
- ⦿ waiting for Qualification supervisor's suggestions on next step...