

Status of Top studies

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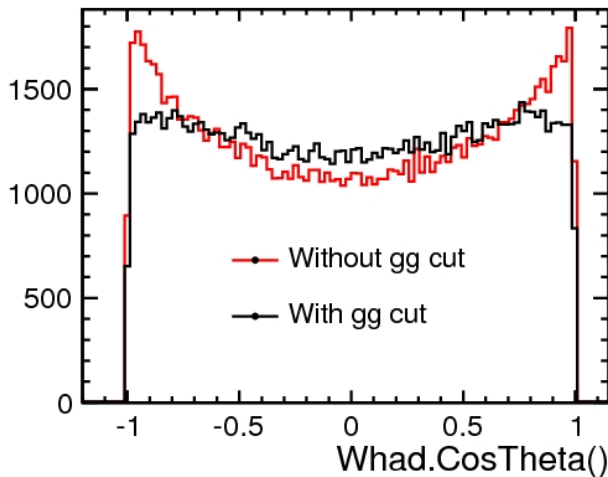
March 12, 2013



Outline

- 1 Gamma-Gamma background
- 2 New study of the χ^2
- 3 Study of not $t\bar{t}$ events
- 4 Conclusion and Outlook

Effect of my cut on W hadronic
Whad.CosTheta()

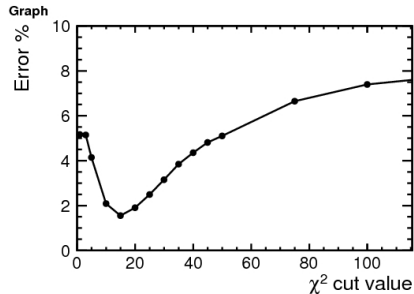
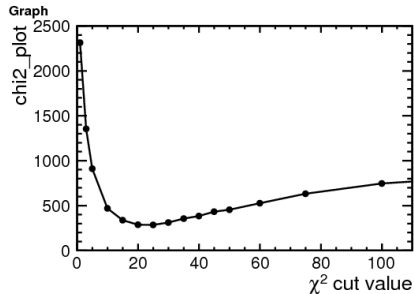


Discussion

Why using a new variable?

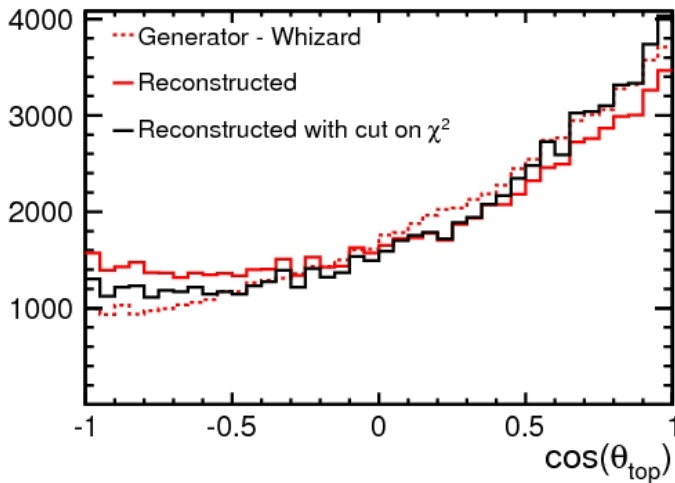
- 1 Using AFB to choose the χ^2 is probably not the best solution.
 - 2 Idea: try to base the choice of the χ^2 cut value on the correspondence between the MC plot and the Reconstructed one.
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- 1 For that we are using a χ^2 test between the two plots.

Comparison



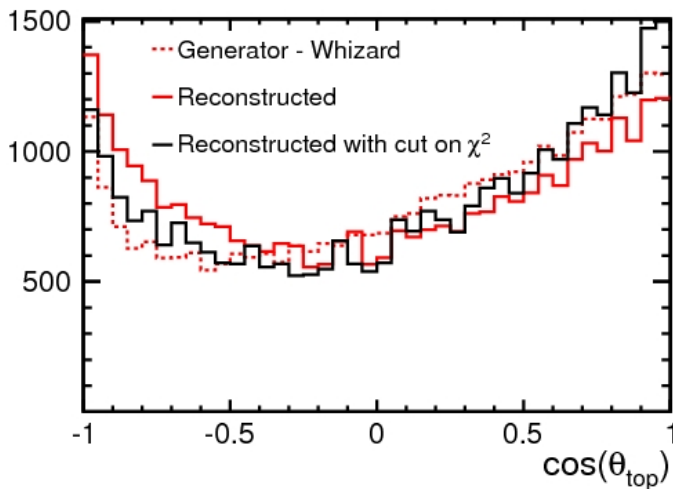
The χ^2 test gives a more flat result.

Results with a χ^2 cut of 25



The result is not so nice because of the $\gamma\gamma$ background.

A_{FB} for not $t\bar{t}$ events



As expected the asymmetry is inverse for the none $t\bar{t}$ events.

Conclusion

- ① Not many time to work on the top with the test beam.
- ② The first results with the χ^2 test seems good, but need to be tested on a pure sample.
- ③ To be continued.