

Triggers for $R(\Lambda_c)$



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Why Triggers are important

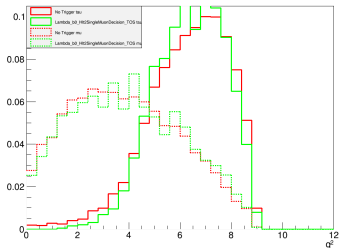
- ⇒ The triggers that were used in $R(D^*)$ biased the distribution of the variables that were fitted.
- ⇒ The bias was an unlucky one as the τ mode was getting more similar to the μ mode.
- ⇒ They eventually used a H1t2CharmHadD02HH_D02KPi which was not designed for this analysis but by accident pick it up.
- ⇒ Today I will show the impact of the trigger line

Why Triggers are important

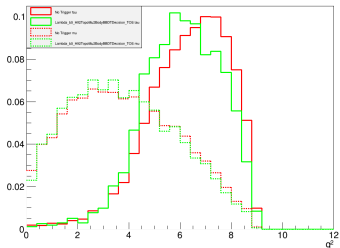
- ⇒ The triggers that were used in $R(D^*)$ biased the distribution of the variables that were fitted.
- ⇒ The bias was an unlucky one as the τ mode was getting more similar to the μ mode.
- ⇒ They eventually used a `H1t2CharmHadD02HH_D02KPi` which was not designed for this analysis but by accident pick it up.
- ⇒ Today I study if the distribution changes for the baryon case.
- ⇒ In all cases I will use one stripping line:
`Strippingb2LcMuXB2DMuNuXLine`

Trigger impact

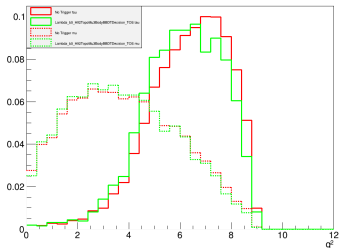
qT145 [Lambda_c STAR] TRUED=16424 [Lambda_c STAR] TRUES=19124 [Lambda_c STAR] TRUED=19124 [Lambda_c STAR] TRUES=19124



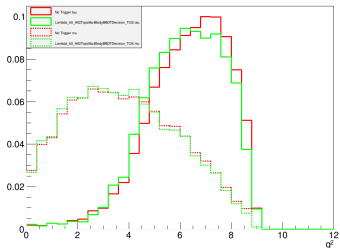
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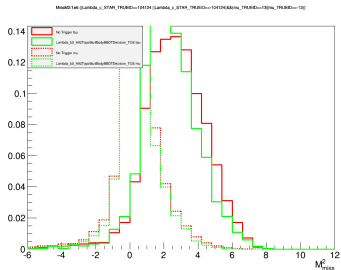
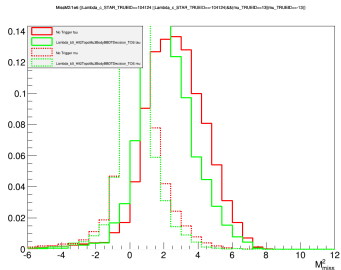
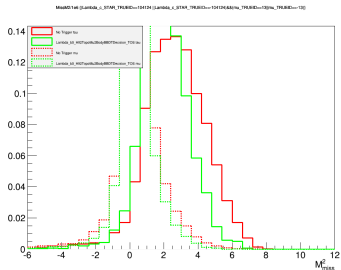
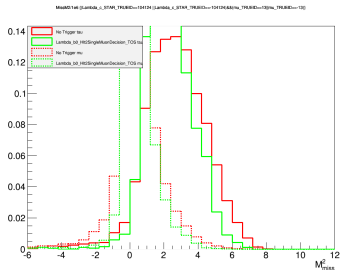
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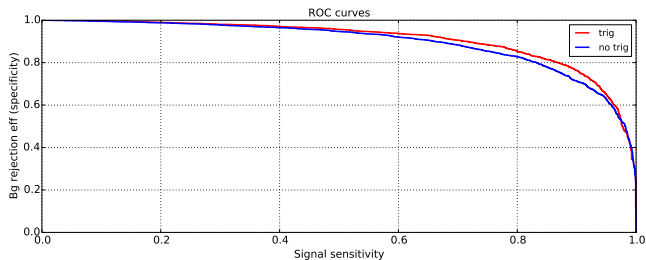


Trigger impact



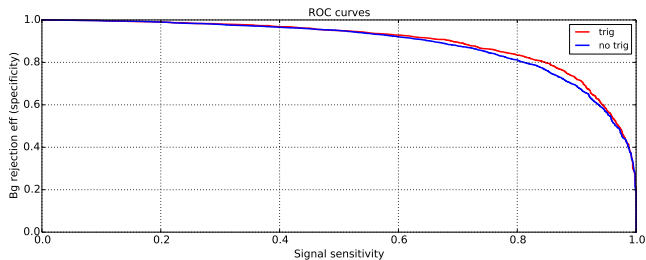
BDT output

- Last week I did a fast check without any optimisation.
- XGB:



BDT output

- Last week I did a fast check without any optimisation.
- BDT:



BDT optimisation

- With the optimisation (area under ROC):
- BDT:

