

# Triggers for $R(\Lambda_c)$



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April 12, 2016

# Why Triggers are important

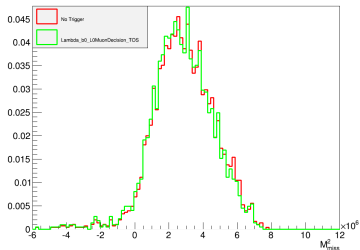
- ⇒ The triggers that were used in  $R(D^*)$  biased the distribution of the variables that were fitted.
- ⇒ The bias was an unlucky one as the  $\tau$  mode was getting more similar to the  $\mu$  mode.
- ⇒ They eventually used a H1t2CharmHadD02HH\_D02KPi which was not designed for this analysis but by accident pick it up.
- ⇒ Today I will show the impact of the trigger line

# Why Triggers are important

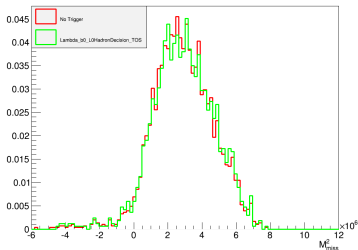
- ⇒ The triggers that were used in  $R(D^*)$  biased the distribution of the variables that were fitted.
- ⇒ The bias was an unlucky one as the  $\tau$  mode was getting more similar to the  $\mu$  mode.
- ⇒ They eventually used a H1t2CharmHadD02HH\_D02KPi which was not designed for this analysis but 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

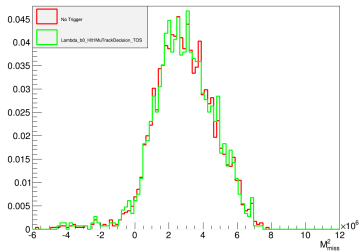
MissM2 [(Lambda\_b0\_TRUEID==5122)|(Lambda\_b0\_TRUEID==5122)]



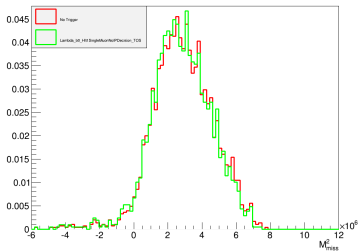
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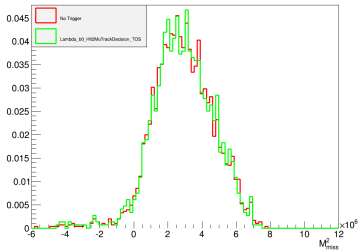


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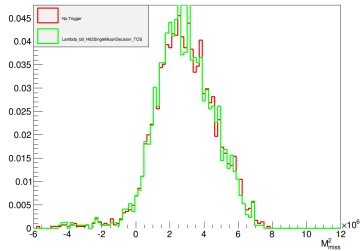


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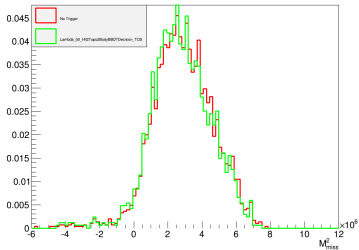
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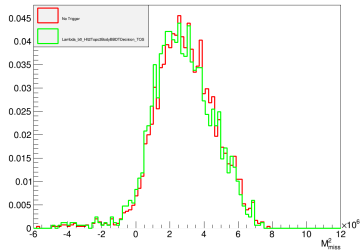
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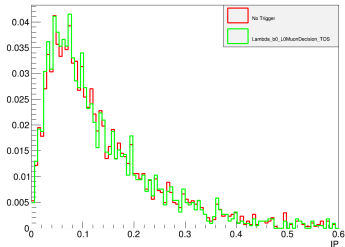


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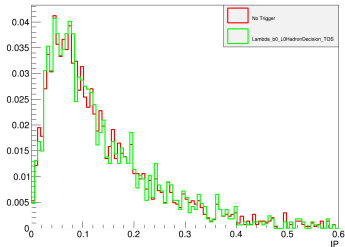


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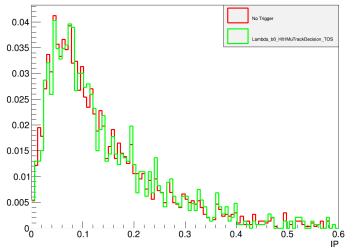
Lambda\_b0\_IP\_OWNPV (Lambda\_b0\_TRUEID==5122)[.lambda\_b0\_TRUEID==5122]



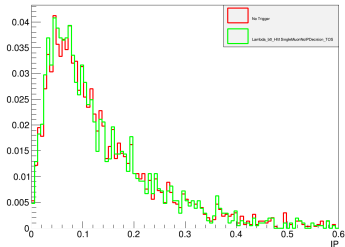
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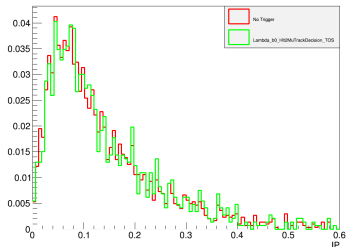


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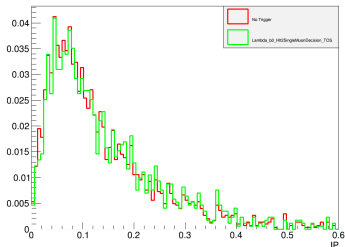


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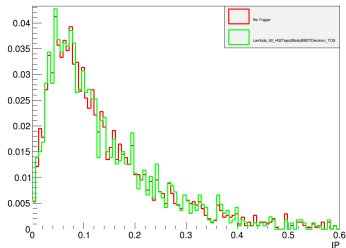
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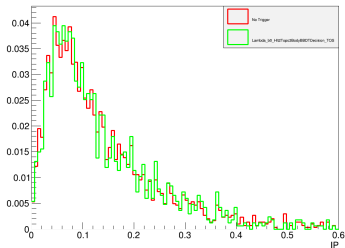
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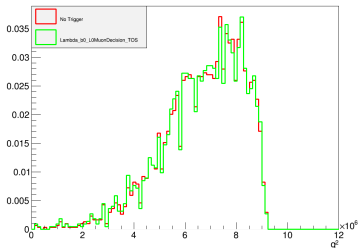


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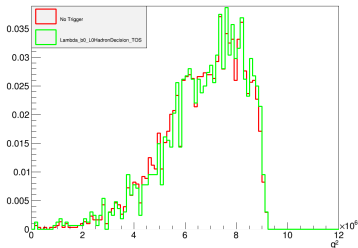


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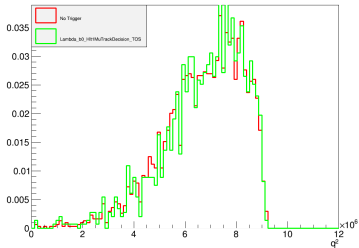
q2 (Lambda\_b0\_TRUEID==5122||Lambda\_b0\_TRUEID==5122)



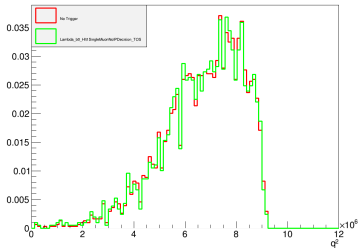
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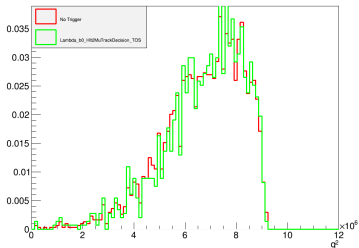
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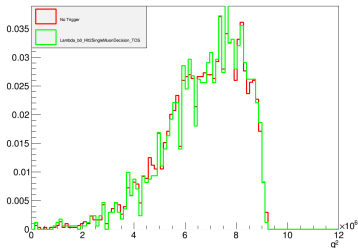


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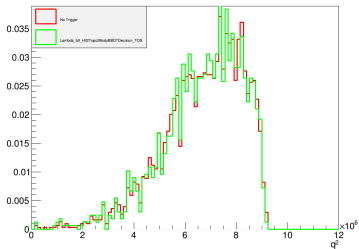
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