

# Updates on activities.

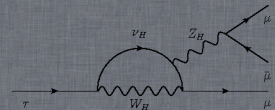
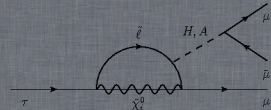
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13<sup>th</sup> August 2013



University of  
Zurich<sup>UZH</sup>

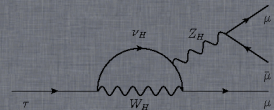
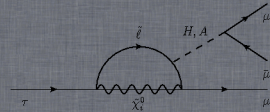
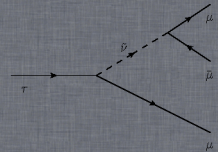
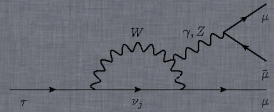


$\tau \rightarrow 3\mu$

MC samples

Binning optimisation

Cleaning samples



# MC Samples

Finished producing normalization channel samples:  $D_s \rightarrow \phi(\mu\mu)\pi$ .

The mixing proportion are:

①  $c\bar{c} \rightarrow D_s \rightarrow \phi(\mu\mu)\pi$  897000

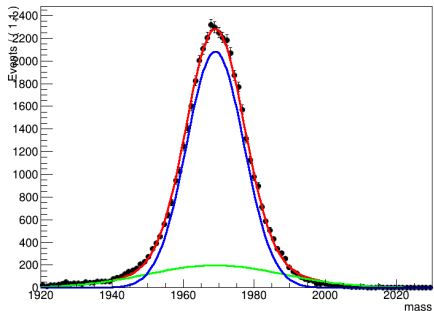
②  $b\bar{b} \rightarrow D_s \rightarrow \phi(\mu\mu)\pi$  103000

All done. 😊

# MC Samples

MC

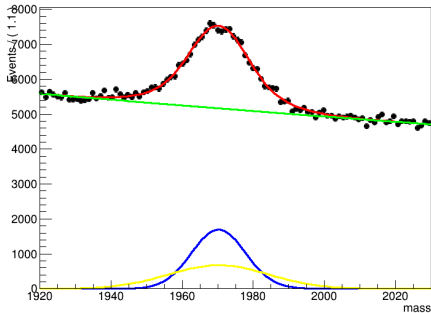
A RooPlot of "mass"



All done. 😊

DATA

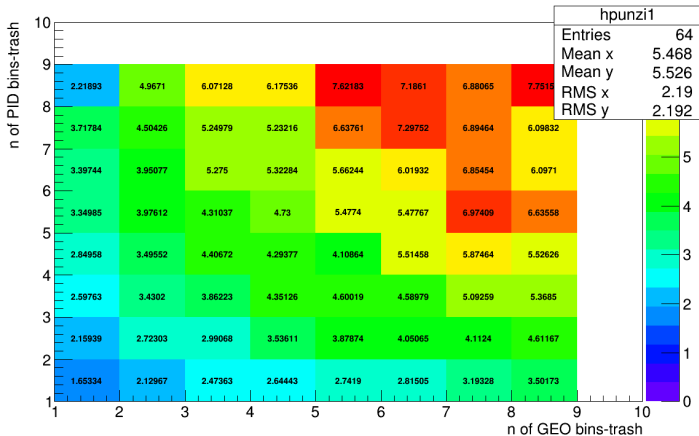
A RooPlot of "mass"



# Binning optimisation

Used Punzi FOM instead of CLs. Did also fine tuning.

HPunzi1



# Cleaning samples

I observed a strange a strange thing. Even tho we simulate a chain: $B \rightarrow D \rightarrow \tau \rightarrow 3\mu$ .

In the ntuples we have events that truthmatch: $cc \rightarrow D \rightarrow \tau \rightarrow 3\mu$ .  
It's  $< 2\%$  effect so in the end I just cut them away and renormalized it again.

# Apologies

I'm very sorry for a small update but I was cut off the internet and had only  $\tau \rightarrow 3\mu$  ntuples to play with. I am chasing up with work.