

# Updates

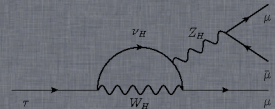
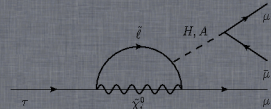
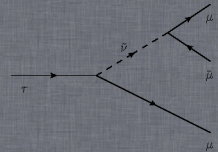
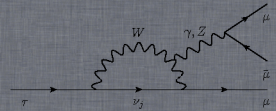
Marcin Chrzęszcz<sup>1,2</sup>

<sup>1</sup> University of Zurich , <sup>2</sup> Institute of Nuclear Physics, Krakow,

March 13, 2014

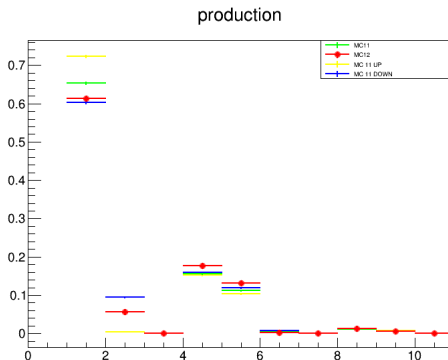


University of  
Zurich<sup>UZH</sup>



# Errors?

- Compared 2011 ntuples and 2012 in terms of  $\tau$  production.



# Errors?

- But this isn't the correct error!
- The error here comes from cross sections and branching fractions.
- After long discussions with Jon we believe the problem was in rounding in 2011 weights.

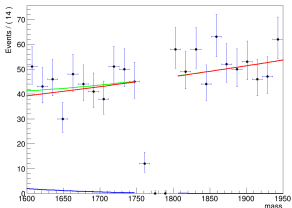
P.S. Triggers for 2012 are ready! Jon will comment more

# $\eta$ background REMINDER

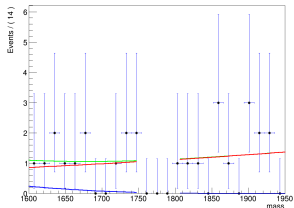
- I fixed the  $\eta$  background PDF.
- Without any constrains the pdf in some bins fluctuates to 0, which is wrong.
- Now made repeated the fit with constrains(gauss+pois).

# $\eta$ background

A RooPlot of "mass"



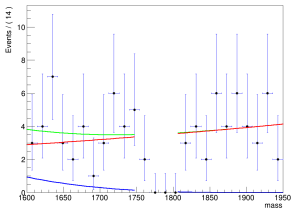
A RooPlot of "mass"



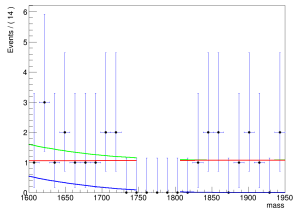
Pid0.4 – 0.45, Blend 0. – 0.28

Pid0.4 – 0.45, Blend 0.28 – 0.32

A RooPlot of "mass"



A RooPlot of "mass"



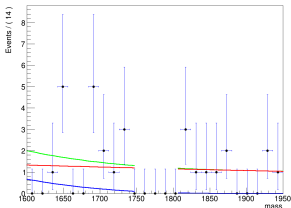
Pid0.4 – 0.45, Blend 0.32 – 0.46

Pid0.4 – 0.45, Blend 0.46 – 0.54

*M.Chrzęszcz 2014*

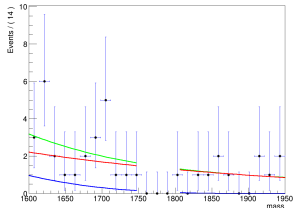
# $\eta$ background

A RooPlot of "mass"



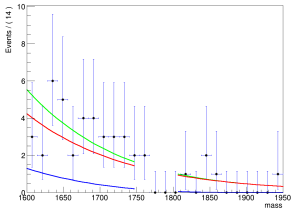
Pid0.4 – 0.45, Blend 0.54 – 0.65

A RooPlot of "mass"



Pid0.4 – 0.45, Blend 0.65 – 0.80

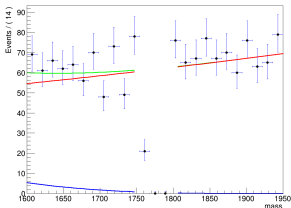
A RooPlot of "mass"



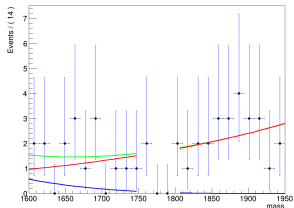
Pid0.4 – 0.45, Blend 0.8 – 1.0

# $\eta$ background

A RooPlot of "mass"



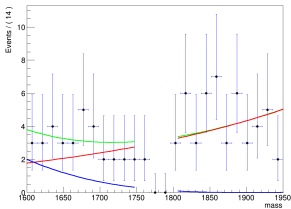
A RooPlot of "mass"



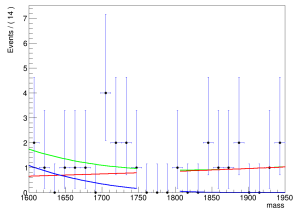
Pid0.45 – 0.54, Blend 0. – 0.28

Pid0.45 – 0.54, Blend 0.28 – 0.32

A RooPlot of "mass"



A RooPlot of "mass"



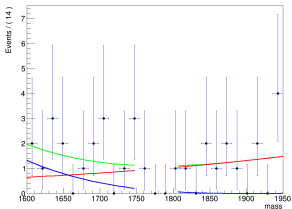
Pid0.45 – 0.54, Blend 0.32 – 0.46

Pid0.45 – 0.54, Blend 0.46 – 0.54

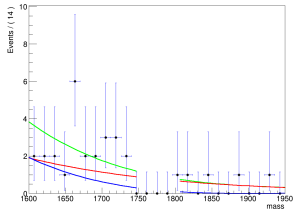
*M.Chrzęszcz 2014*

# $\eta$ background

A RooPlot of "mass"



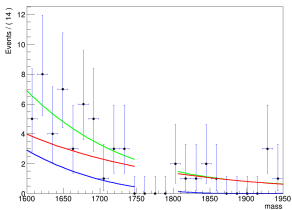
A RooPlot of "mass"



Pid0.45 - 0.54, Blend 0.54 - 0.65

Pid0.45 - 0.54, Blend 0.65 - 0.80

A RooPlot of "mass"

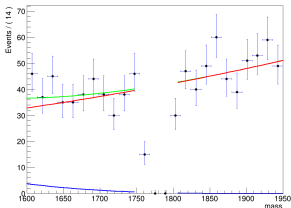


Pid0.45 - 0.54, Blend 0.8 - 1.0

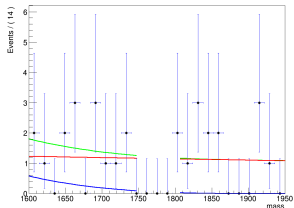


# $\eta$ background

A RooPlot of "mass"



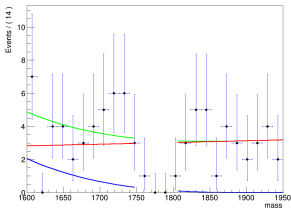
A RooPlot of "mass"



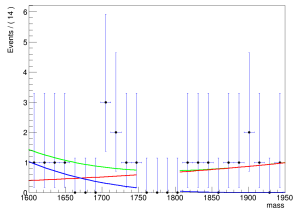
Pid0.54 – 0.63, Blend 0. – 0.28

Pid0.54 – 0.63, Blend 0.28 – 0.32

A RooPlot of "mass"



A RooPlot of "mass"



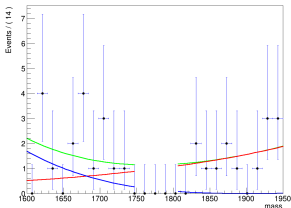
Pid0.54 – 0.63, Blend 0.32 – 0.46

Pid0.54 – 0.63, Blend 0.46 – 0.54

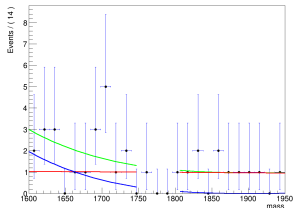
*M.Chrzęszcz 2014*

# $\eta$ background

A RooPlot of "mass"



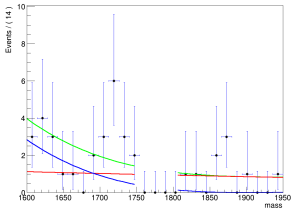
A RooPlot of "mass"



Pid0.54 - 0.63, Blend 0.54 - 0.65

Pid0.54 - 0.63, Blend 0.65 - 0.80

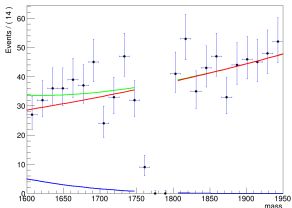
A RooPlot of "mass"



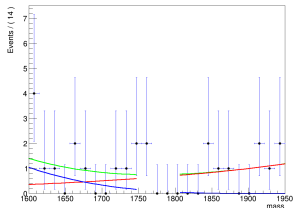
Pid0.54 - 0.63, Blend 0.8 - 1.0

# $\eta$ background

A RooPlot of "mass"



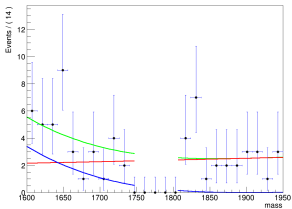
A RooPlot of "mass"



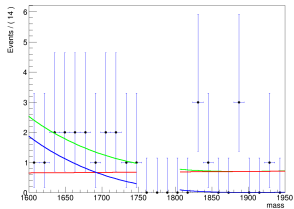
Pid0.63 – 0.75, Blend 0. – 0.28

Pid0.63 – 0.75, Blend 0.28 – 0.32

A RooPlot of "mass"



A RooPlot of "mass"



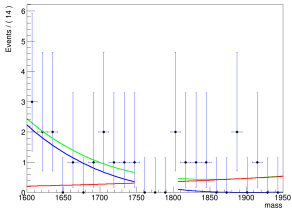
Pid0.63 – 0.75, Blend 0.32 – 0.46

Pid0.63 – 0.75, Blend 0.46 – 0.54

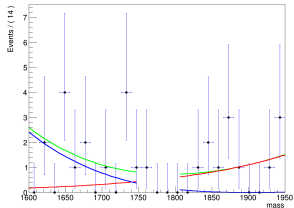
*M.Chrzęszcz 2014*

# $\eta$ background

A RooPlot of "mass"



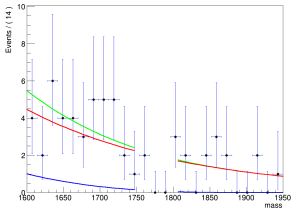
A RooPlot of "mass"



Pid0.63 – 0.75, Blend 0.54 – 0.65

Pid0.63 – 0.75, Blend 0.65 – 0.80

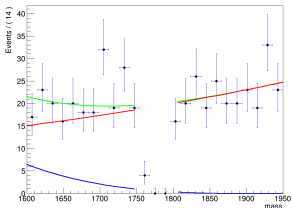
A RooPlot of "mass"



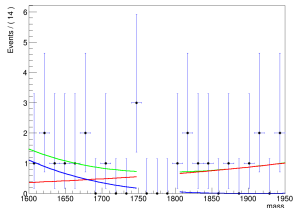
Pid0.63 – 0.75, Blend 0.8 – 1.0

# $\eta$ background

A RooPlot of "mass"

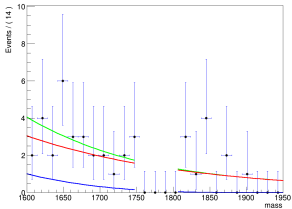


A RooPlot of "mass"



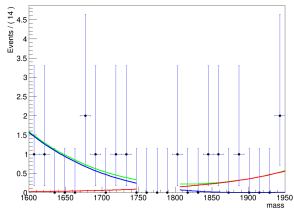
Pid0.75 – 1, Blend 0. – 0.28

A RooPlot of "mass"



Pid0.75 – 1, Blend 0.28 – 0.32

A RooPlot of "mass"



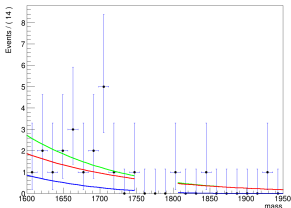
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Pid0.75 – 1, Blend 0.46 – 0.54

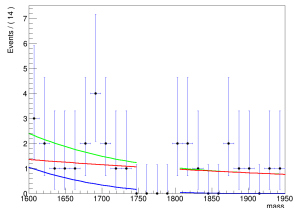
*M.Chrzyszcz 2014*

# $\eta$ background

A RooPlot of "mass"



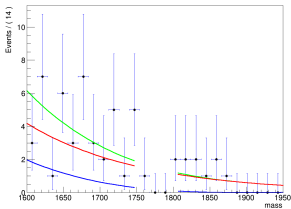
A RooPlot of "mass"



Pid0.75 – 1, Blend 0.54 – 0.65

Pid0.75 – 1, Blend 0.65 – 0.80

A RooPlot of "mass"



Pid0.75 – 1, Blend 0.8 – 1.0