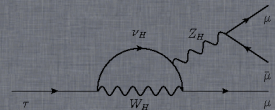
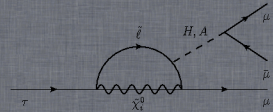
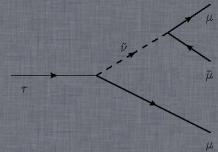
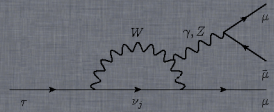


Quo vadis $\tau \rightarrow 3\mu$?

Marcin Chrząszcz

Institute of Nuclear Physics,
Polish Academy of Science

31st October

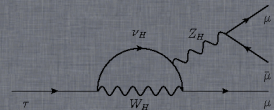
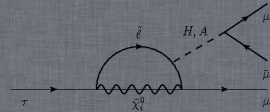
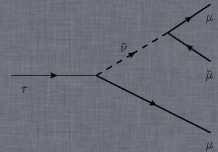
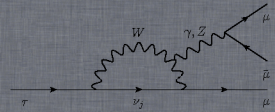


η cutting

Cutting η

Peak in signal window

Limit Permutations



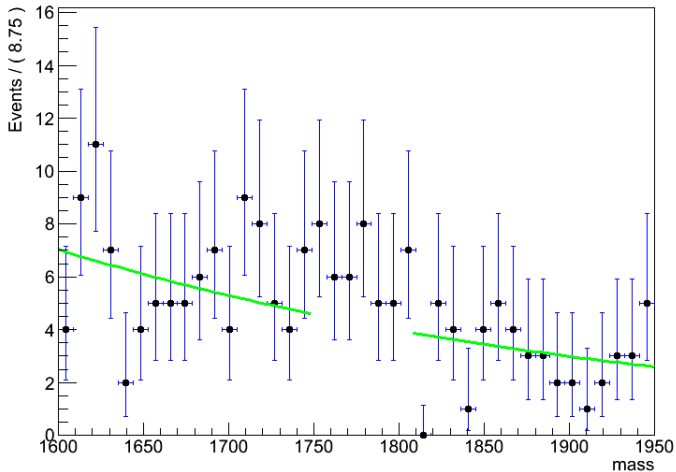
Cutting η

We have two possibilities to cut η away:

- Use MLP:
 - 1 In low bins we see bad $M(3\mu)$ distribution. Peaks in in tau mass.
 - 2 We safe signal: we are loosing 32% signal.
- Veto η :
 - 1 Lower efficiency. 36% lost of signal.
 - 2 Safe and easy physics interpenetration.

Peak in signal window

A RooPlot of "mass"



Limit Permutations, Many thanks to Paul

- OLD: 8.3
- NEW, full eta cut: >8.9
- New, eta cut high bins: > 8.9

Something is wrong.

Conclusion

Limit holds another cross check. We are happy =)