Drell-Yan MC studies

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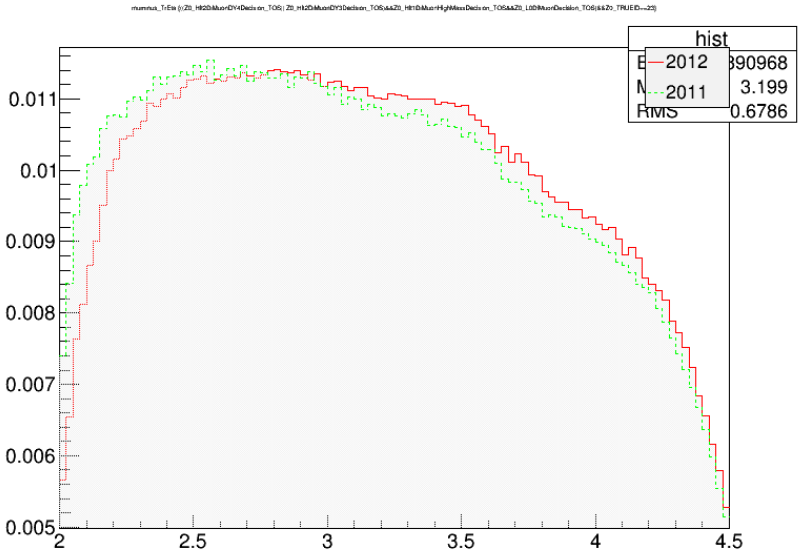
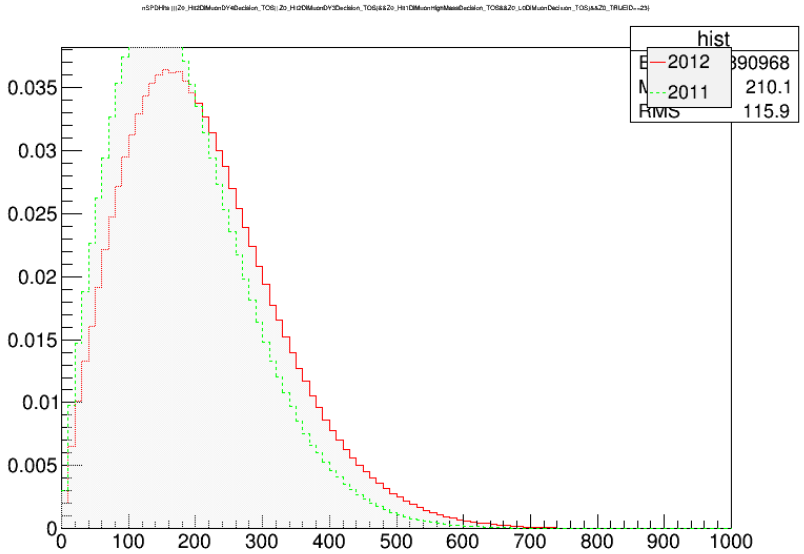
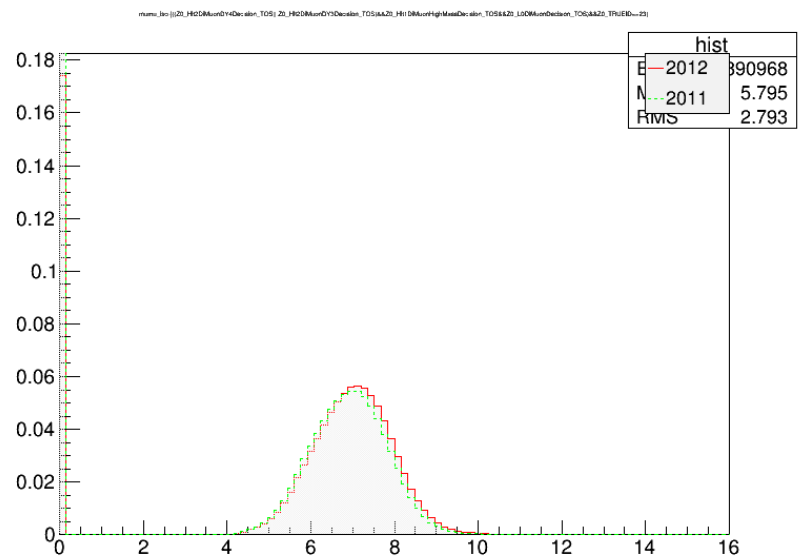
Reminder

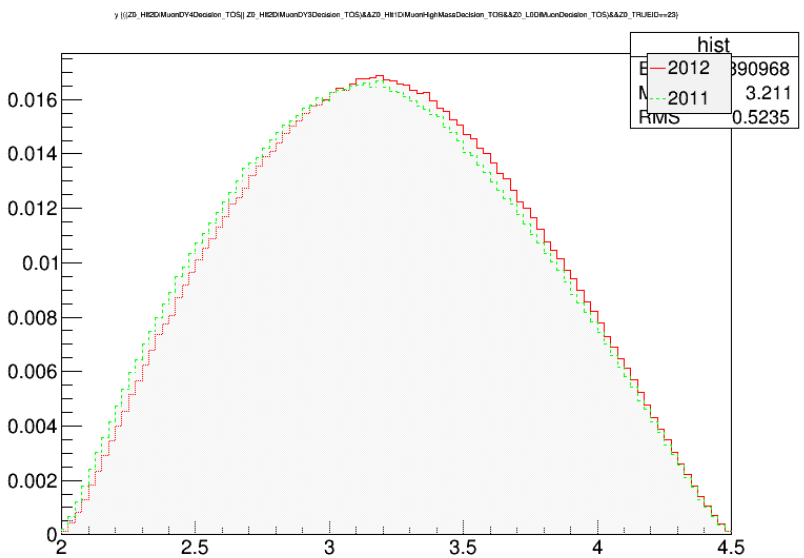
- We ordered $4 \cdot 9M$ MC events of Drell-Yan production.
- I already check that Z^0 form splot in data looks similar.
- All data distributions after Drell-Yan trigger looks similar.
- Today will show MC comparison between 2011 vs 2012.

2011 vs 2012

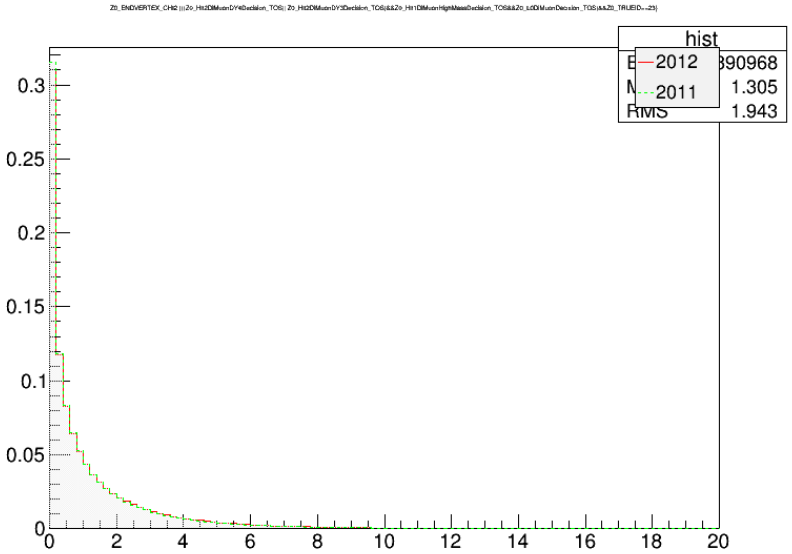

hist
2012
2011
3.199
0.6786

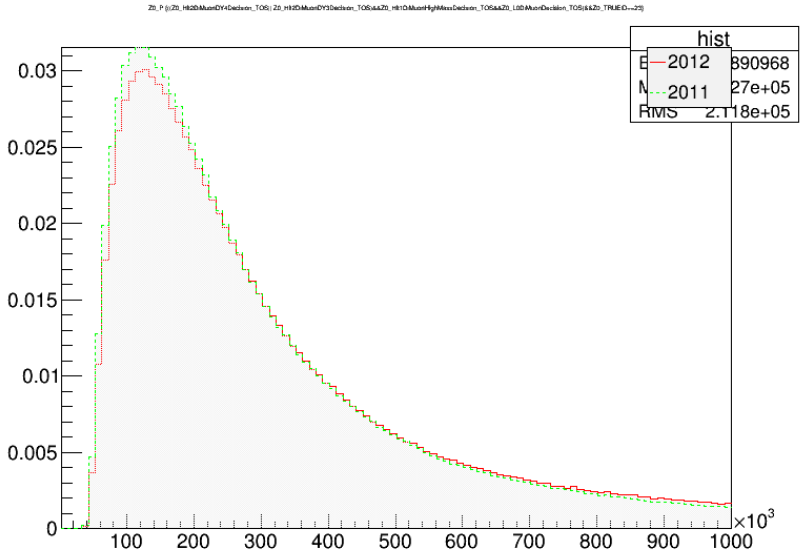

hist
2012
2011
210.1
115.9

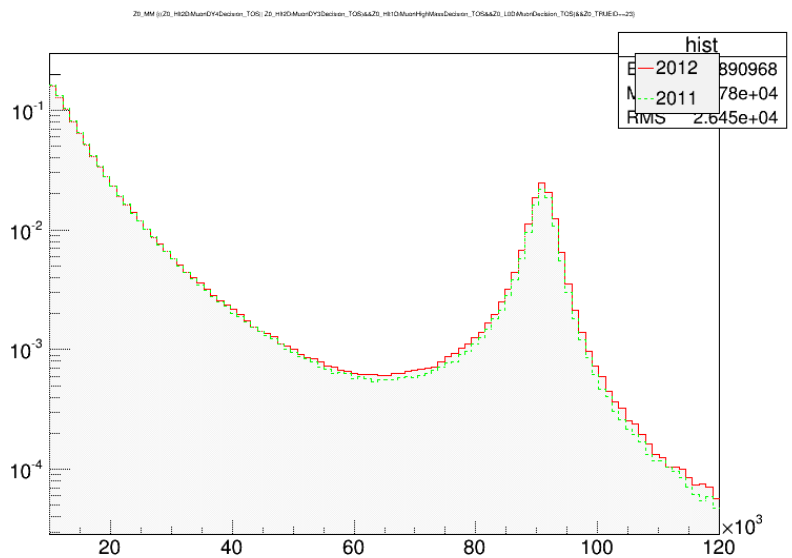

hist
2012
2011
5.795
2.793

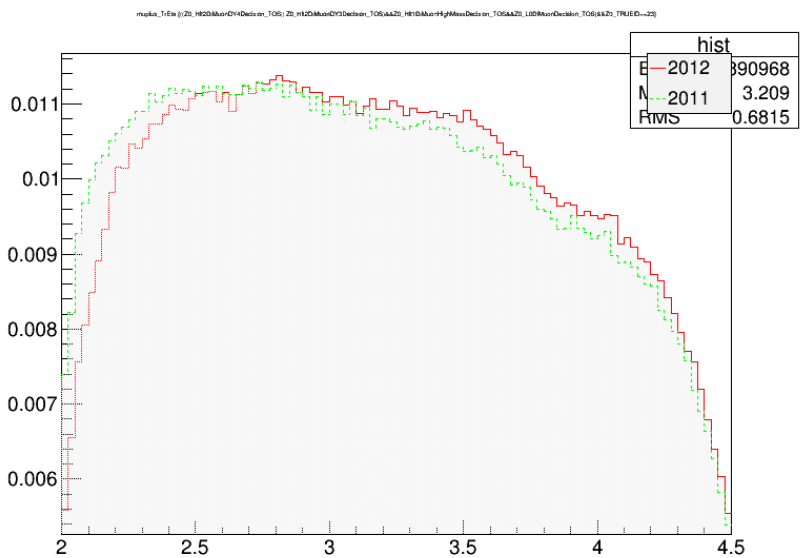

hist
2012
2011
3.211
0.5235

2011 vs 2012


hist
2012
2011
RMS 1.943


hist
2012
2011
×10^3


hist
2012
2011
RMS 2.645e+04
×10^3


hist
2012
2011
RMS 0.6815

Some idea

- So Nicola used TFractionFitter which is a ROOT class.
- I need to admit that I never trusted fits from ROOT more complicated then polynomial or gauss.
- Also Nicola saw that there is bias in the low dimuon mass.
- Did some digging and there is an alternative compatible with RooFit and RooStats: `HistFactory`.
- Reimplementing everything to this. We can use it as cross check if it's not better.

Backup