Smearing Method
for background events

Very brief update
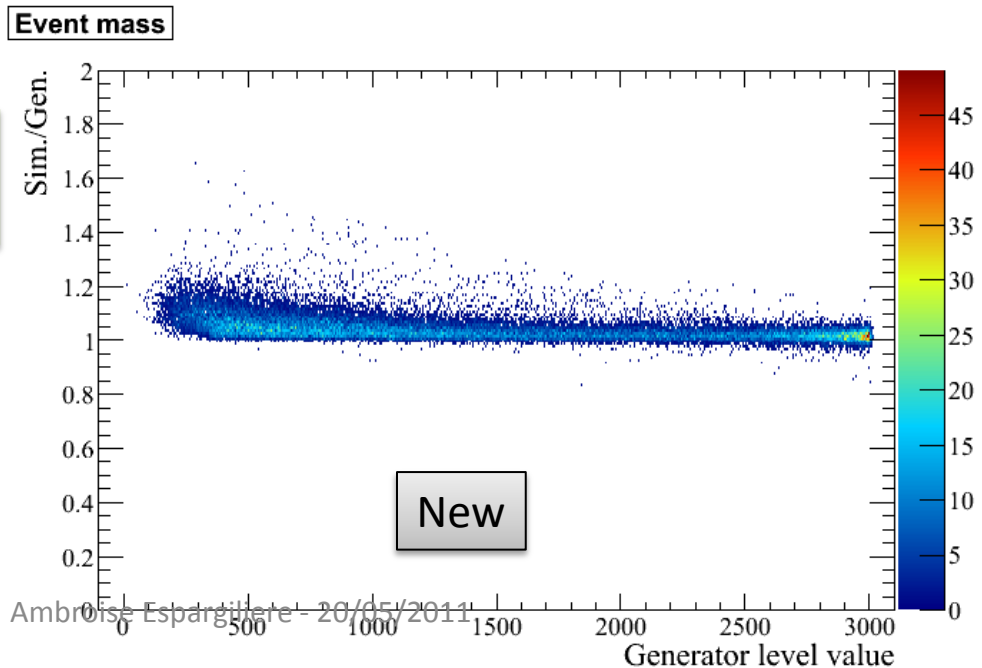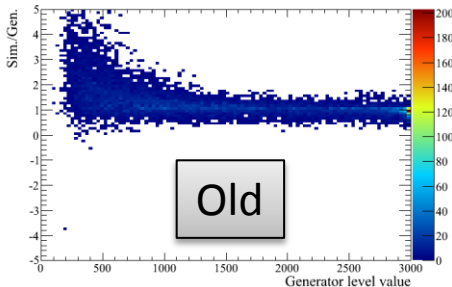
ttbar analysis meeting - CERN

20/05/2011

- Basics are in the slide of the 29/04/2011 and WG6 of 5/05/2011

- Previous main issues:
  - Low values inconsistencies
  - Edge effects
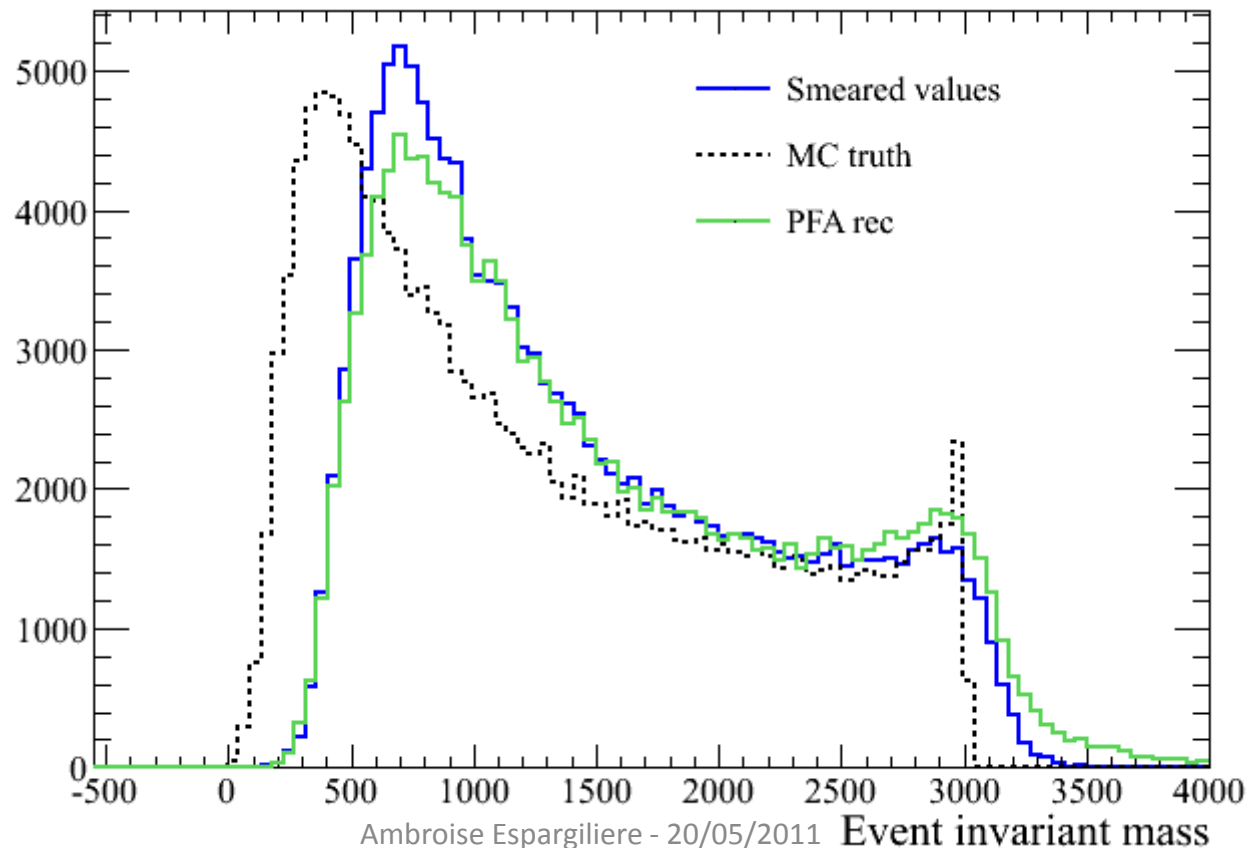 - Correlations between variables

Low values inconsitencies

- Previously:
  - $C_{smear} = [Sim/Gen]_{Gen} * Gen$
- Now
  - $C_{smear} = ([Sim+k/Gen+k]_{Gen} * Gen) - k$

No more low value divergence of the coeff
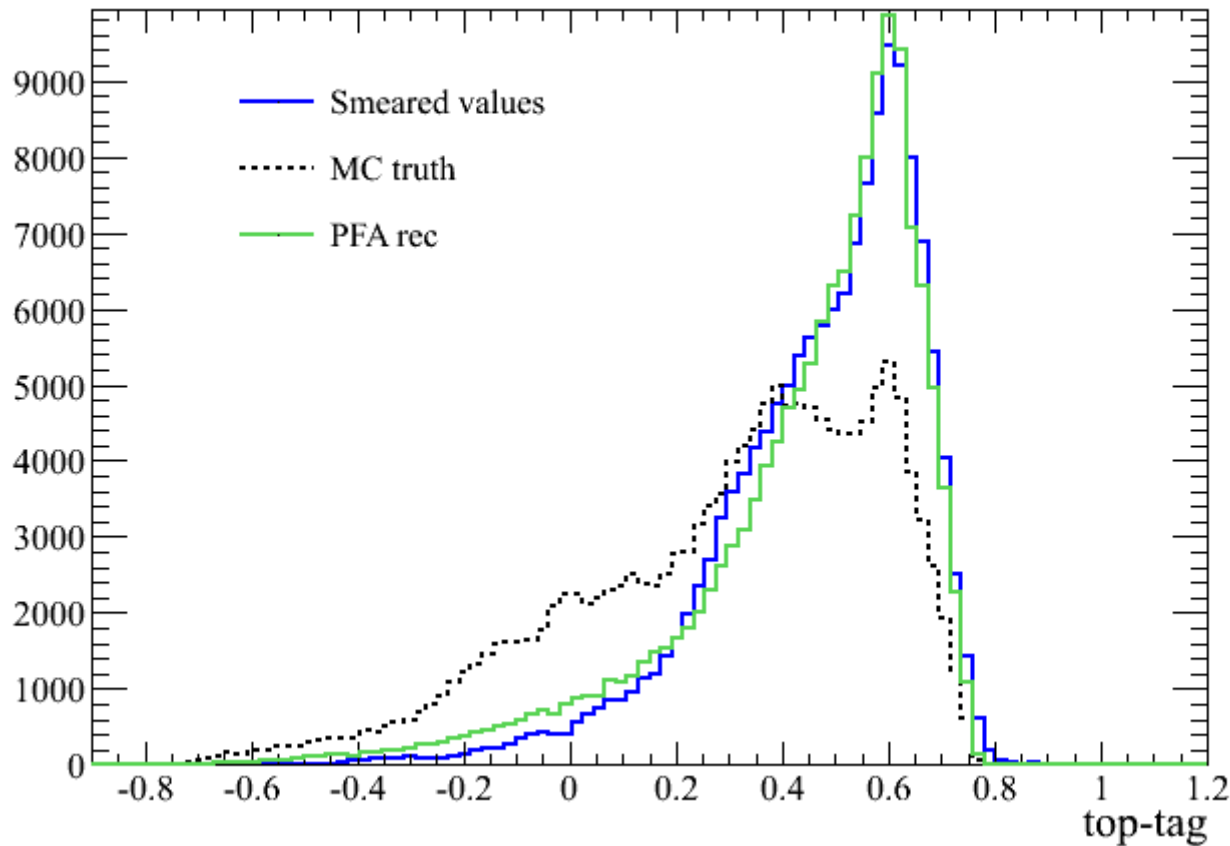

Event mass

Old

New

Edge effects

- The higher granularity of the reduces the edge effect.

Correlations between variables

- Problem avoided by smearing only the MVA output

Conclusion

- Still some fine tuning maybe useful

- The method behaves rather well and reliably