Generators Group

ALPGEN Production Status

Marco Dias, Maurizio Pierini, Thiago Tomei
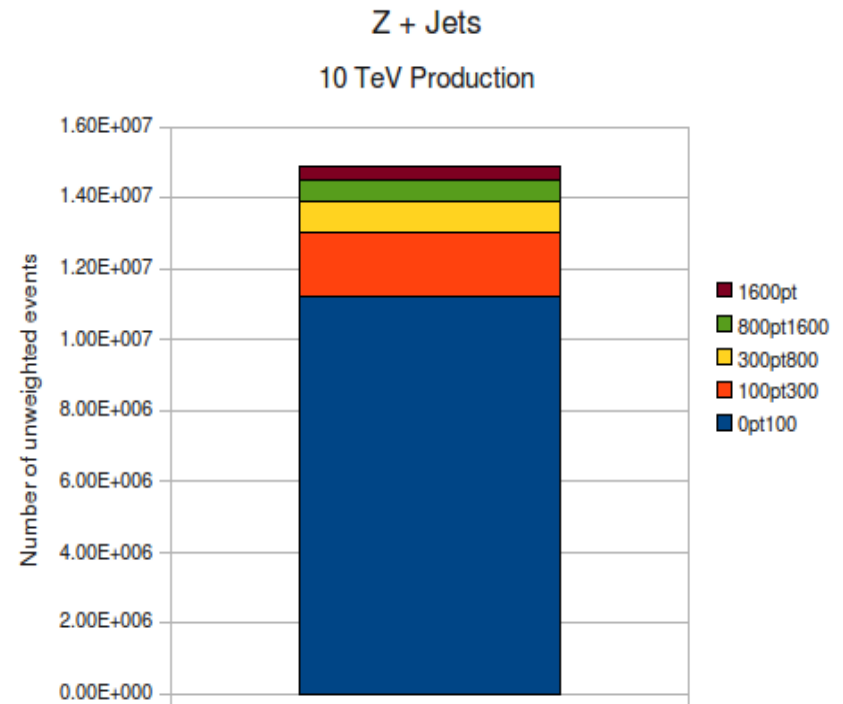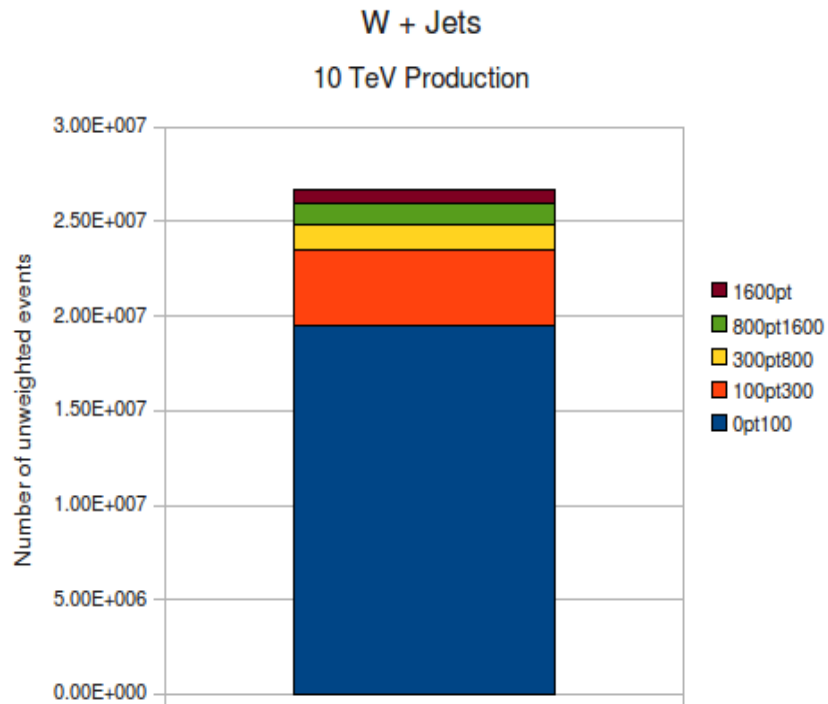
Introduction

- Two concurrent productions: 7 TeV and 10 TeV.

  - 7 TeV has higher priority.

  - Aiming for 200/pb of simulated luminosity or 10000 events per relevant process, whatever is higher.

  - Can be upscaled later.

- For more information , please see my Sep 3rd presentation.

Status: W,Z + jets 10 TeV

- 26.5 M W+jets unweighted events, resulting in 11 M matched events.

- 15 M Z+jets unweighted events, resulting in 8.8 M matched events.

- Only up to +4 jets, but +5 jets can be added with no hassle.

Status: W,Z + jets 7 TeV

- 17.2 M W+jets unweighted events, resulting in 7.3 M matched events.

- 2.4 M Z+jets unwieghted events, resulting in 880K matched events.

- MISSING SAMPLES:

  - W+jets, pt > 1600 GeV

  - Z+jets, 800 < pt < 1600 GeV and pt > 1600 GeV

  - Notice that pt > 1600 GeV have very small x-section (expect < 10^{-4} events at 1/fb luminosity). Propose to lower the priority of these samples, pushing them to the back of the line.

The Line

1) W + jets – 10 M requested. ⇐ **DONE**

2) Z + jets – 2 M requested. ⇐ **being done**

3) ttbar + jets – 7.5 M requested. ⇐ **grids OK**

4) (Wc, Wcc, Wbb, Zcc, Zbb) + jets – 3.3 M requested. ⇐ **grids OK**

5) Njets for Exotica (4,5,6 partons) – # requested. ⇐ **grids OK**

6) Njets for QCD – 20 M requested. ⇐ **need grids**

7) Photon + jets for QCD – 17 M requested. ⇐ **need grids**

8) bbbar + jets – 7.5 M requested. ⇐ **need grids**

Please note that these are the events requested, but will not necessari be the final numbers.

Some considerations

- Z+jets samples had to be fixed, due to XML idiossincracies.

  - Don't put "40. < m(l+l-) < 200." in the ALPGEN header – it will confuse the XML header into thinking that you're opening a new tag (remember that tags are in between <> in XML.

- SPRACE (São Paulo T2) will go into downtime until Monday for physical relocation.

  - Pros: this relocation will allow a near-future upgrade.

  - Cons: delay in production.