Parameters Setting

- **Code Version: p05.00.04**
- **Common cuts: $|\eta^*|$ <4.2 and $\hat{p}_T$ >5 GeV**
- **Common PDFs: CTEQ4M**
- **Common Luminosity Conditions:**

$$\begin{cases} Low\ lumi.: overlay\ of\ \ <>= 1.0\ MinBias\ event\ (\mathcal{L} = 2 \times 10^{32} cm^{-2} s^{-1}) \\ Max.\ lumi.: overlay\ of\ \ <>= 2.5\ MinBias\ event\ (\mathcal{L} = 5 \times 10^{32} cm^{-2} s^{-1}) \\ half\ the\ statistics\ each \end{cases}$$

EM ENERGY SCALE					
Process	**MC Generator**	**Cuts**	**N$_{events}$**	**Geometry**	**Producer**
Light Resonances					
$J/\Psi \to e^+e^-$	**PYTHIA**	$p_T(e^\pm)$ **>1 GeV**	**25 K**	**Mixture**	**Oleg**
$\Upsilon \to e^+e^-$	**PYTHIA**	$p_T(e^\pm)$ **>1 GeV**	**25 K**	**Mixture**	**Morgan/Oleg?**
Heavy Resonances					
$Z \to e^+e^-$	**PYTHIA**		**50 K**	**Mixture**	**Smain/Marie-Claude**
$Z \to e^+e^-$	**PYTHIA**		**10 K**	**Plate**	**Smain/Marie-Claude**
$W^\pm \to e^\pm\nu_e$	**PYTHIA**		**50 K**	**Mixture**	**Patrice**
$W^\pm \to \tau^\pm\nu_\tau \to e^\pm\nu_e\nu_\tau$	**PYTHIA**		**10 K**	**Mixture**	**P-A**

HADRON AND JET ENERGY SCALE					
Process	**MC Generator**	**Cuts**	**N$_{events}$**	**Geometry**	**Producer**
Non-Resonant Processes					
$\gamma + jet$	**PYTHIA**	**(9 bins)**	**90 K**	**Mixture**	**Vipin**
$\gamma + jet$	**PYTHIA**	**(9 bins)**	**30 K**	**Plate**	**Vipin**
MinBias	**ISAJET**		**100 K**	**Plate**	**Steve**
QCD (udscg)	**PYTHIA**	**(7 bins)**	**140 K**	**Mixture**	**Arnaud, David, Karl, Steve**
Resonant Processes					
$Z \to q\bar{q}$	**PYTHIA**		**20 K**	**Mixture**	**Jérôme**
$Z \to b\bar{b}$	**PYTHIA (QQ)**		**20 K**	**Mixture**	**Stéphanie/Tibor**