

Pythia 8: How to generate collider data at your local systems

Installation of Pythia 8 at your own Laptops/Desktops.

- You can install Ubuntu 16.04 latest release, which is open source.
- You can download Ubuntu bootable from the link:

To get going with the program, do the following (on a Linux/Ubuntu or Mac OS X system):

- Download the file pythia8185.tgz to a suitable location.
- Go to your home directory:
- `cd $HOME`
- `mkdir Pythia8`
- `cd Pythia8`
- `wget http://home.thep.lu.se/~torbjorn/pythia8/pythia8185.tgz`
- When you download the file pythia8185.tgz then run the following commands.
- `tar xvfz pythia8185.tgz`
- `cd pythia8185`
- `make`
- `cd rootexamples`
- `make hist`
- `./hist.exe`

You will see the histogram in the output of this program. The output root file can be open by the following command:

```
root -l hist.root  
[root]new TBrowser;
```

```
cp /scratch/m/mahmad/SLP2016/Pythia/hist.cc .  
make hist  
./hist.exe
```

- Online manual of Pythia 8 is available at:
- <http://home.thep.lu.se/~torbjorn/pythia82php/Welcome.php>

Short Exercise:

If this works fine, then you can copy my hist.cc file and make plots histograms.

Path of my file is:

```
cd $HOME/Pythia8/rootexamples  
cp /scratch/m/mahmad/SLP2016/hist.cc .
```