Background for the

PYTHIA8

Bootcamp

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October 24, 2017

Preliminary Setup

- A little bit of preparation for the Tutorial will make your experience more enjoyable and profitable
- I will first describe a streamlined method to make it easier to follow the material and examples
- It is based on installing a Virtual Machine (VM) borrowed from the CTEQ Summer School tutorial
- Note: I am testing this on a Mac, but my colleague has used it successfully with Ubuntu Linux
- An alternative method for savvy Mac users is described on slide (but it will still require work on your side, and it is just easier to use the VM)

VM Installation Instructions

1. I direct you to this page `http://www.slac.stanford.edu/~shoeche/cteq17/` and then add a few clarifications
2. When it says “Create a new machine” – that means to run VirtualBox from your applications and click “New” (saw blade?)
3. Settings are changed by clicking the gear icon
4. Under Display, I found it useful to increase the “Scale Factor” for your window
5. Choose the option “Use an existing virtual hard disk file” and select CTEQ17.vdi (which you downloaded earlier)

Savvy Mac Users Instructions

1. follow the Quick Start instructions here `https://github.com/davidchall/homebrew-hep` (install brew if you need to and then install fastjet, hepmc, lhapdf, rivet, and yoda)
2. get the Pythia8 installation from svn or tarball `http://pythia8.hepforge.org`
3. build using the paths to all of the goodies from the above repo (by default, they should all go in /usr/local/)
4. if you use lhapdf directly, you will need to download the PDF data: type `lhapdf --help'`
5. if you have any problems, please go back to the VM option

Have a burning question?

- There are 3 sessions, so it is possible to adapt the third one
- If there is a topic/example you are dying to see, go ahead and ask for it
- If it seems to be of general interest, I might fit it in the last session, but no promises