Week 1 – January 25/27, 2022
High Energy Physics Computing Basics

Objectives

- Setup functioning workstation (terminal, editor, git, computing accounts)
- Understand role of computing in High Energy Physics research
- Identify appropriate computing resources (peer, community, instructors)

Workstation Checklist

- ☐ Access to terminal (Mac/Linux terminal included, PC->puTTy)
- ☐ Install ROOT software (latest possible version) and python3
- ☐ Install favorite text editor (e.g. emacs)
- ☐ Configure environment on lxplus

Exercises

- ✎ Create and edit text files locally and remotely (lxplus)
  - o Public vs work vs scratch spaces
- ✎ Setup an *alias* to log into lxplus
  - o What is .bash_profile?
- ✎ Develop your personalized text editor (grab a basic one, add something new)
  - o Be prepared to defend your position!
- ✎ Create summary sheet of unix commands
  - o Many online -> make your own!

Outline – Jan 25th

- Introductions
  - o Name, preferred pronouns, feel free to share anything about yourself, what will you be working on
- Expectations
  - o Where are we starting from?
  - o From Instructor
    - ▪ Participatory exchange
    - ▪ Extensively use resources from previous years (link to Indico category)
    - ▪ Adding element of science communication
    - ▪ Would like to see students who can engage in *physics* discussions during/after program

- o From Students
  - ▪ What material do you want to cover?
  - ▪ What skills do you want to feel confident in by summer?
- Round-robin of personal computers and tools already installed
  - o OS, terminal, text editor, root/python, grid certificate
- Exercises
  - o Terminal sandbox
  - o Customized login
  - o Text editor
  - o Create shortcut sheet, common one?

HW for Tuesday Jan 25th, due Thursday Jan 27th 9am Pacific:

- Prepare pros/cons of your favorite text editor for a <1 minute elevator pitch
- Reflect on expectations/goals for this class, send to instructors