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

Outline – Jan 25th

- Introductions
  - Name, preferred pronouns, feel free to share anything about yourself, what will you be working on
- Expectations
  - Where are we starting from?
    - 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