Week 1 – January 25/27, 2022
High Energy Physics Computing Basics
Setting Up Your Workstation

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->Cygwin/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, .basrc?
❖ 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 25\textsuperscript{th}

- **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
    - 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**
  - OS, terminal, text editor, root/python, grid certificate

- **Exercises**
  - Terminal sandbox
  - Customized login
  - Text editor
  - Create shortcut sheet, common one?

**HW for Tuesday Jan 25\textsuperscript{th}, due Thursday Jan 27\textsuperscript{th} 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
Outline – Jan 27th

- New Meeting Time
  - Ideally, 8:00-9:15am T/Th
  - Have not received response from everyone, please let me know conflicts asap

- Workstation checklist
  - Together, go through above exercises
  - 1min elevator pitch: why your workstation is great (OS, text editors, peripherals)

HW for Thursday, due by end of weekend

- Complete workstation
- Fill out preliminary survey (check you emails)