January 31, 2023 (Week 2)

High Energy Physics Computing Basics, Part 3

Objectives:

- Learn more bash functionality and scripts
- Learn about permissions
- Learn text editors
- Learn to work on a remote server

Outline:

- Opening
- Setup round-table
 - o CERN account
- Exercises
 - Basic terminal commands
 - Wildcards
 - Egrep
 - Piping outputs (to commands and to files)
 - Sleep
 - Symbolic links
 - exit
 - Permissions
 - Text editors (vim/emacs and VSCode)
 - Shell scripts
 - Shebang
 - Variables
 - Range-based loops
 - If/else controls
 - VSCode GUI
 - Explorer
 - Text editor
 - Pdf viewer
 - Extensions
 - ssh
 - Log into lxplus
 - Lxplus resources (https://resources.web.cern.ch/resources/)
 - X11 (XQuartz/Xming)
 - scp

ssh config

Homework - due 8am February 2, 2023:

- Bash script
 - o Include for loop
 - o Include if/else logic
 - o Print to screen
 - o Pipe text to file
 - o Create new directory
 - If it already exists, delete it first and then make it again