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|  | **Introduction to Linux Session Agenda** |

Presenters: Ritu Arora(*TACC*) and Je’aime Powell(*TACC*)

* **[*9:15 - 9:30*]** - Duo and Globus Connect Setup
* **[*9:30 - 10:30*]:**Linux Primer (Overview, Basic Linux Commands)
  + **Introduction to Linux** including its history: <=10 minutes
  + **Basic Linux commands** in the browser - focus purely on Linux commands: <=45 minutes
    - <https://bellard.org/jslinux/vm.html?url=https://bellard.org/jslinux/buildroot-x86.cfg>
    - ls, pwd, mkdir, cd, cat, cp, history, rm, mv, exit, CTRL+D
      * We will create a file using the cat command
    - We just finished working in a VM. In the next session, we will start working on an XSEDE system on which, we will repeat the commands run in the browser.
* **[*10:30 - 10:45*]** - Break
* **[*10:45 - 11:45*]** - Linux CLI and Text Editors
  + **What is Stampede2?** A remotely available XSEDE supercomputer, housed at TACC, that uses the Linux OS.
  + **SSH to Stampede2** - Using Linux Commands on XSEDE systems
    - Run the commands learnt so far on the Stampede2 login node
    - vi editor
      * Create a file
        + vi commands - please refer to the cheat-sheet
      * Edit a file
    - nano editor
    - Additional commands: ps, jobs, whoami, date, cal, clear, more/less
* **[*11:45- 12:45*]** - Lunch
* **[*12:45 - 1:45*]** - More Linux Commands and Some Bash Scripting
  + groups, chmod, tar, mail
  + if-else, for-loop, variables
  + System calls from programs
  + scp versus cp, rsync
  + modules - just FYI
* **[*1:45 - 2:00*]** - Break
* **[*2:00 - 2:45*]** - Using XSEDE (Job Submissions, Globus, SSO, GSISSH)
  + SLURM job-script
    - Batch computing mode versus interactive computing mode
    - Job scheduler
    - Elements of a batch job-script
  + Globus
    - An exercise on file transfer between two different systems
  + SSO/GSISSH
* **[*2:45 - 3:00*]** - Survey