## Logging In

- We will follow the "Single Sign On via SSH Login Hub", so you can enter
  - ssh <u>username@login.xsede.org</u>
  - your XUP passcode
  - then ask for a push to your phone
  - more information is at <a href="https://portal.xsede.org/">https://portal.xsede.org/</a>
     web/xup/single-sign-on-hub
- From the login portal, you can log into bridges/ comet by entering
  - gsissh bridges' or
  - `gsissh comet'
- To log out of a remote computer, press control-D

```
Minh-IIT-MBP2018:[~]: ssh daveminh@login.xsede.org
Please login to this system using your XSEDE username and password:
Duo two-factor login for daveminh
Enter a passcode or select one of the following options:

    Duo Push to XXX-XXX-4139

 2. Phone call to XXX-XXX-4139
Passcode or option (1-2): 1
Success. Logging you in...
Last login: Sat Feb 1 13:41:10 2020 from 207.237.205.39
  Welcome to the XSEDE Single Sign-On (SSO) Hub!
  This system is for use by authorized users only, and is subject to the XSEDE
  Acceptable Use Policy, described at https://www.xsede.org/usage-policies.
  All activities on this system may be monitored and logged.
  Your storage on this system is limited to 100MB. Backup is not provided.
  From this system, you may login to other XSEDE system login hosts on which
  you currently have an active account. To see a list of your accounts, visit:
  https://portal.xsede.org/group/xup/accounts
  To login to an XSEDE system login host, enter: gsissh <login-host>
  where <login-host> is the hostname, alias or IP address of the login host.
  The following default gsissh host aliases have been defined:
            bridges comet mason osg rmacc-summit stampede
            stampede2 supermic wrangler-iu wrangler-tacc
  For example, to login to the Comet system at SDSC, enter: gsissh comet
  E-mail help@xsede.org if you require assistance in the use of this system.
[daveminh@ssohub ~]$ gsissh comet
Last login: Sat Feb 1 10:46:54 2020 from 149.165.168.51
Rocks 7.0 (Manzanita)
Profile built 13:03 03-Dec-2019
Kickstarted 14:18 03-Dec-2019
        \___/ /_/
comet-ln3: [~]
```

## The Bridges File System

- As described in the <u>Bridges user guide</u> under "File Spaces", Bridges allows you to store data in
  - your home directory (\$HOME) shared across nodes, backed up, smaller quota (10 GB)
  - a "scratch" directory (\$SCRATCH) shared across nodes, not backed up, faster than \$HOME, larger quota shared by class
  - the worker node for a job (\$LOCAL) only accessible by local node, not backed up and immediately deleted after job, faster than shared disk space, many terabytes of available space
  - the local memory for a job (\$RAMDISK) only accessible by local node, not backed up and immediately deleted after job, fastest storage
  - \$(VARIABLE\_NAME) is a variable that contains the actual location. The variable is available while logged onto Bridges
- Try `cd \$SCRATCH', 'pwd', `cd \$HOME', and 'pwd'