

A scenic view of the University of Colorado Boulder campus. In the foreground, a large brick building with a central tower and a flagpole stands amidst trees with vibrant autumn foliage in shades of yellow, orange, and green. In the background, a massive, rugged mountain with rocky peaks rises under a clear blue sky with a few wispy clouds.

Accessing Remote Systems

Be Boulder.



University of Colorado **Boulder**

Remote Systems

- A remote system is one that you are accessing from another computer
- Unless you have built a cluster at home, or work in an HPC center, most HPC systems will require remote access
- Two ways one interacts with a remote system
 - Logging in
 - File transfer

Logging in

- Generally, one uses an ssh protocol to login to a remote system
- Provides a secure channel over which one can remotely connect
- Authenticate connection through keys, public and private
- Example:

```
ssh username@remote.hostname
```

Might have some flags after the ssh

File Transfer

- Recommend several ways
 - Depends on your needs and size of data
 - scp, sftp, wget, rsync, Globus file transfer
 - scp and sftp are good because they are secure

- Example (several ways to do this):

```
scp /home/username/file.txt
```

```
username@remote.hostname:/home/username
```

```
scp username@remote.hostname:/home/username/file.txt .
```