mycscons on Mio

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- We can use `srun` to submit to the cluster
  - This allows us to batch submit scripts
  - However, we have another option for m8r

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- We can use `./mycscons` to submit an SConstruct to the cluster
  - Requires `from rsf.mycluster import *` in SConstruct
  - Requires `Cluster()` command in Sconstruct
    - We will touch on this later

Some helpful tools

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  - `./mycscons` submits the SConstruct in that location
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- Submitting in this way automatically lists where log and error files go
  - They live in your scratch directory

When a job is running

- Using `squeue` shows all running jobs on the cluster
  - Adding `-u username` filters on that *username*
  - Probably a good idea to alias in your `~/.bashrc`
    - `alias sq="squeue -u username"`

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    - `alias sq="squeue -u username"`
- Also shows the task number
  - If you have a job that hangs or is incorrect, rather than waiting you should cancel it:
    - `scancel ####` (←the task number!)

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  - Slurm allocates resources for us
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  - Slurm allocates resources for us
  - This is to avoid conflicts with other users
- However, once resources are allocated to your job, you can log into that node to QC
  - Usually not necessary

Running an interactive job

- If you have a larger compute job not appropriate for the head node, you can request a resource for command line operations
  - `srun -n12 --pty bash -i`

Running an interactive job

- If you have a larger compute job not appropriate for the head node, you can request a resource for command line operations
  - `srun -n12 --pty bash -i`
    - Requests a 12 cpu node with taskname “bash” for an interactive job
- This is not a standard request
  - Remember to exit the interactive job when finished or you will hold the node!