

## Reference Sheet for Slurm

| Command              | What it does                                                                            |
|----------------------|-----------------------------------------------------------------------------------------|
| sinfo                | reports the state of partitions and nodes                                               |
| squeue               | reports the state of jobs in the batch queue                                            |
| sbatch <i>script</i> | submits a job script                                                                    |
| scancel <i>jobid</i> | cancels a pending or running job <i>jobid</i>                                           |
| sacct                | reports accounting information about active and completed jobs                          |
| srun                 | submits job for execution or initiate job steps in real time (used inside batch script) |

| Directive         | Description                                                                   |
|-------------------|-------------------------------------------------------------------------------|
| Partition         | #SBATCH --partition= <i>partitionname</i> OR #SBATCH -p <i>partitionname</i>  |
| Account           | #SBATCH --account= <i>accountname</i> OR #SBATCH -A <i>accountname</i>        |
| Wall time         | #SBATCH --time=01:00:00 OR #SBATCH -t 1:00:00                                 |
| Node count        | #SBATCH --nodes=2 OR #SBATCH -N 2                                             |
| Constraint        | #SBATCH --constraint="c12" OR #SBATCH -C "c12"                                |
| Total tasks count | #SBATCH --ntasks=24 OR #SBATCH -n 24                                          |
| Memory            | #SBATCH --mem=24576 (NOTE: memory given in MB)                                |
| Mail options      | #SBATCH --mail-type=FAIL,BEGIN,END                                            |
| Mail user         | #SBATCH --mail-user=user@mail.com                                             |
| Job name          | #SBATCH --job-name= <i>jobname</i> OR #SBATCH -J <i>jobname</i>               |
| Stderr            | #SBATCH -e slurm-%j.err-%N (where %j is job number and %N is first node name) |
| Stdout            | #SBATCH -o slurm-%j.out-%N                                                    |

**Useful Slurm Aliases** that provide information in a useful manner for our clusters

Bash:

```
alias si="sinfo -o \"%20P %5D %14F %8z %10m %10d %11l %16f %N\""
```

```
alias sq="squeue -o \"%8i %12j %4t %10u %20q %20a %10g %20P %10Q %5D %11l %11L %R\""
```

Tcsh:

```
alias si 'sinfo -o "%20P %5D %14F %8z %10m %11l %16f %N"'
```

```
alias sq 'squeue -o "%8i %12j %4t %10u %20q %20a %10g %20P %10Q %5D %11l %11L %R"'
```