Common Slurm Commands

Quick reference for the most common Slurm commands on the TAU HPC cluster.

Submitting Jobs

Command	Description
`sbatch job.sh`	Submit a batch job script
`srun --pty bash`	Start an interactive session
`sbatch --depend=afterok:JOBID job.sh`	Submit job after another completes

Monitoring Jobs

Command	Description
`squeue -u username`	Your running and pending jobs
`squeue`	All jobs on the cluster
`scontrol show job JOBID`	Full details of a job
`sacct -j JOBID --format=JobID,JobName,State,MaxRSS,Elapsed`	Job accounting and memory usage
`sattach JOBID`	Attach to a running job's output

Managing Jobs

Command	Description
`scancel JOBID`	Cancel a specific job
`scancel -u username`	Cancel all your jobs

Cluster Information

Command	Description
`sinfo`	Partition and node status
`scontrol show partition PARTITION`	Partition details and limits
`check_my_partitions`	Your available partitions and accounts
`features`	Available node constraints/features

Environment Modules

Command	Description
`module avail`	List all available modules
`module avail NAME`	Search for a specific module
`module spider NAME`	Detailed module info including dependencies
`module load NAME`	Load a module
`module list`	List loaded modules
`module unload NAME`	Unload a module
`module purge`	Unload all modules

Common SBATCH Directives

Directive	Description
`#SBATCH --job-name=NAME`	Job name
`#SBATCH --account=ACCOUNT`	Account name
`#SBATCH --partition=PARTITION`	Partition/queue
`#SBATCH --qos=QOS`	Quality of Service
`#SBATCH --time=HH:MM:SS`	Max run time
`#SBATCH --ntasks=N`	Number of tasks
`#SBATCH --nodes=N`	Number of nodes
`#SBATCH --cpus-per-task=N`	CPU cores per task
`#SBATCH --mem-per-cpu=NG`	Memory per CPU
`#SBATCH --mem=NG`	Total memory
`#SBATCH --gres=gpu:N`	Number of GPUs
`#SBATCH --constraint=FEATURE`	Node constraint/feature

Directive	Description
`#SBATCH --array=1-N`	Job array
`#SBATCH --output=FILE_%j.out`	Output file (%j = job ID)
`#SBATCH --error=FILE_%j.err`	Error file
`#SBATCH --mail-user=EMAIL`	Notification email
`#SBATCH --mail-type=END,FAIL`	When to notify

Created 2026-06-14 08:40:03 UTC by levk
Updated 2026-06-14 08:40:46 UTC by levk