Code_Aster

Purpose: Finite Element
Analysis
Latest version: 14.4
Licence: ✅ Free of use
GNU GPL _ext-link
Website: *https://code-aster.org/
_ext-link*

Code_Aster is a computer-assisted engineering suite, with a focus on finite element methods.

The core of Code_Aster is a finite element solver for structural analysis, with additional programs for thermal flows, linear and non-linear static and dynamic analysis, fatigue, damage and fracture tools and multi-physics coupling. A companion open source pre- and post-processor, Salome, is also available.

SLURM Submit script example

More information about the submit script can be found using the *Job Script Generator*.

aster_example.slm

```
#!/bin/bash
#SBATCH -J aster_example
#SBATCH -e aster_example.err
#SBATCH -o aster_example.out
#SBATCH -p std
#SBATCH -n 12
#SBATCH -t 0-02:00

module load apps/code_aster/13.4

# Execute Code Aster here
```

Sbatch options:

The options shown in the example are detailed below. For more information and a more comprehensive list of available options, see the *sbatch command page*.

- **-J**: Name for the job's allocation.

- **-e**: Name of the sterr redirection filename.

- **-o**: Name of the stdout redirection filename.

- **-p**: Name of the partition (queue) where the job will be submited.

- **-n**: Number of tasks.

- **-c**: Number of cores per task.

- **-t**: Set the job's time limit. If the job don't finish before the time runs out, it will be killed.