Tracks course: GPU-accelerated Computational Mechanics using Python and CUDA

Use Vera and labb computers

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1 Vera

If you don't have your own lap-top with an Nvidia-compatible graphics card, you may use Vera at C3SE. Login with

```
ssh CID@vera2.c3se.chalmers.se
```

or

```
ssh CID@vera1.c3se.chalmers.se
```

Before you run a Python code which uses `CUDA` you must each time you login type

```
module purge
ml AMGX/2.3.0-foss-2021a-CUDA-11.3.1 SciPy-bundle/2021.05-foss-2021a matplotlib/3.4.2-foss-2021a
```

You may run small test cases on the login node. But you have also access to student nodes on the cluster. To login to a node, create a batch file (for example 'batch-file') with the text

```
#!/usr/bin/env bash
#SBATCH -A C3SE 2023/2-15
#SBATCH --gres=gpu:T4:1
#SBATCH -p vera
#SBATCH -t 0-00:05:00
module purge
ml AMGX/2.3.0-foss-2021a-CUDA-11.3.1 SciPy-bundle/2021.05-foss-2021a matplotlib/3.4.2-foss-2021a
sleep 600
```

The last line means that you will stay logged in for 600 seconds. Submit the job by typing

```
sbatch batch-file
```

If you type

```
squeue  -u lada
```

(replace my 'lada' which your CID) you'll see your job and the node (for example 'vera41-1' below 'SCHEDNODES'). Now login to that node by typing

```
ssh vera41-1
```

2 StuDAT computers

Here you find instructions how to use StuDAT computers.