## 1. How to connect

The IP is now <u>snellius.surf.nl</u> rather than <u>lisa.surfsara.nl</u>. So, connect using `ssh <user>@snellius.surf.nl`.

Additionally, Snellius only allows traffic from UvA IPs by default. As a result, you need to either access it from the UvA/eduroam/Amsterdam Science Park WiFi, or use the <u>UvA VPN</u>. If you are having issues with that, you can try connecting to the "doornode" login node, by using `ssh <user>@doornode.surfsara.nl`. If that also doesn't work, and you have a static IP, we can ask the SURF team to whitelist it, but we should only resort to this as a very last option.

### 2. Modules

Although `module load 2021` / `module load Anaconda3/2021.05` might work, it is recommended to use the 2022 modules instead as they are now fully supported. Thus, use `module load 2022` and `module load Anaconda3/2022.05` in your SLURM scripts.

### 3. SLURM GPU partition

Snellius has a single partition with GPU access, which is "gpu". Additionally, you can only request increments of 1/4 of a node, and not just any arbitrary choice of CPU cores / RAM / GPUs. Since a full node has 72 CPU cores, 480GB RAM, and 4 NVIDIA A100 GPUs (40GB VRAM), the minimum allocation is 18 CPU cores, 120GB RAM, and 1 GPU. This should be sufficient for your projects, so avoid requesting more to keep your budget consumption low. An example job script would be:

```
#!/bin/bash
#SBATCH --job-name=ATCSJob
#SBATCH --partition=gpu
#SBATCH --gres=gpu:1
#SBATCH --cpus-per-task=18
#SBATCH --mem=120gb
#SBATCH --time=01:00:00
#SBATCH --output=slurm_output_%A.out
```

module purge module load 2022 module load Anaconda3/2022.05 source activate <your environment name>

cd \$HOME/<your project directory>
python -u <your python file>

## No GPU login node

As opposed to Lisa, Snellius does not have a GPU login node. Consequently, all operations that require a GPU must be done through the SLURM scheduler, either by srun or sbatch. (So the steps described at the end of "Verifying the installation" won't work, unless it is within a job.)

# 5. SURF Wiki on Snellius

For more detailed documentation, refer to SURF's wiki entries about Snellius:

- <u>Hardware and file systems</u>
- Usage and accounting