0 – Setting up JupyterLab (Conda) on Linux

Bálint Aradi

Scientific Programming / Wissenchaftliches Programmieren in Python (2025)

https://atticlectures.net/scipro/python-2025/

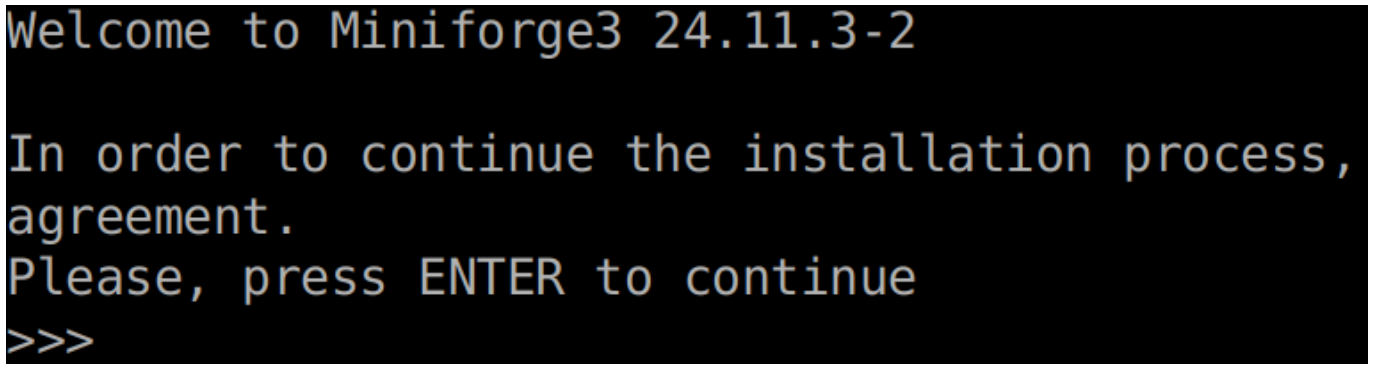
Install Conda (miniforge) on Linux, MacOS & WSL

- Open a command line terminal
- Create a directory for user installed packages in your HOME directory

```
mkdir ~/opt
```

- Download and start the miniforge installer (see Miniforge installation instructions)

```
wget "https://github.com/conda-forge/miniforge/releases/latest/download/
Miniforge3-$(uname)-$(uname -m).sh"
bash Miniforge3-$(uname)-$(uname -m).sh
```



Press ENTER

then repeatedly SPACE

finally type “yes” hit ENTER to accept it

Install Conda (miniforge) on Linux, MacOS & WSL

```
Miniforge3 will now be installed into this location:
/home/aradi/miniforge3

  - Press ENTER to confirm the location
  - Press CTRL-C to abort the installation
  - Or specify a different location below

[/home/aradi/miniforge3] >>> ~/opt/miniforge3
```

Enter folder for installation

```
You can undo this by running `conda init --reverse $SHELL`? [yes|no]
[no] >>>
```

Accept default answer [no]

Set up Conda working environment

- Activate conda from a terminal

```
source ~/opt/miniforge3/bin/activate
```

- Update Conda (in case newer versions for packages in base are available)

```
conda update --all
```

```
❯ conda update --all
Channels:
 - conda-forge
Platform: linux-64
Collecting package metadata (repodata.json): done
Solving environment: done
```

Set up Conda working environment

- Create a special environment for all the course related stuff

```
conda create -n scipro
```

- Activate the **scipro** environment

```
conda activate scipro
```

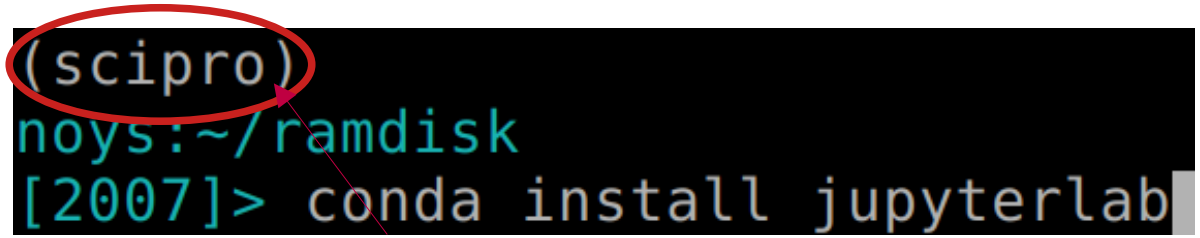
- We will install all course related programs into this environment.
- Whenever you open a **new** terminal, where you want to invoke programs from this environment, you must activate this environment.

```
source ~/opt/miniforge3/bin/activate scipro
```

Set up Conda working environment

- Install JupyterLab (make sure, you are in the scipro environment!)

```
conda install jupyterlab
```



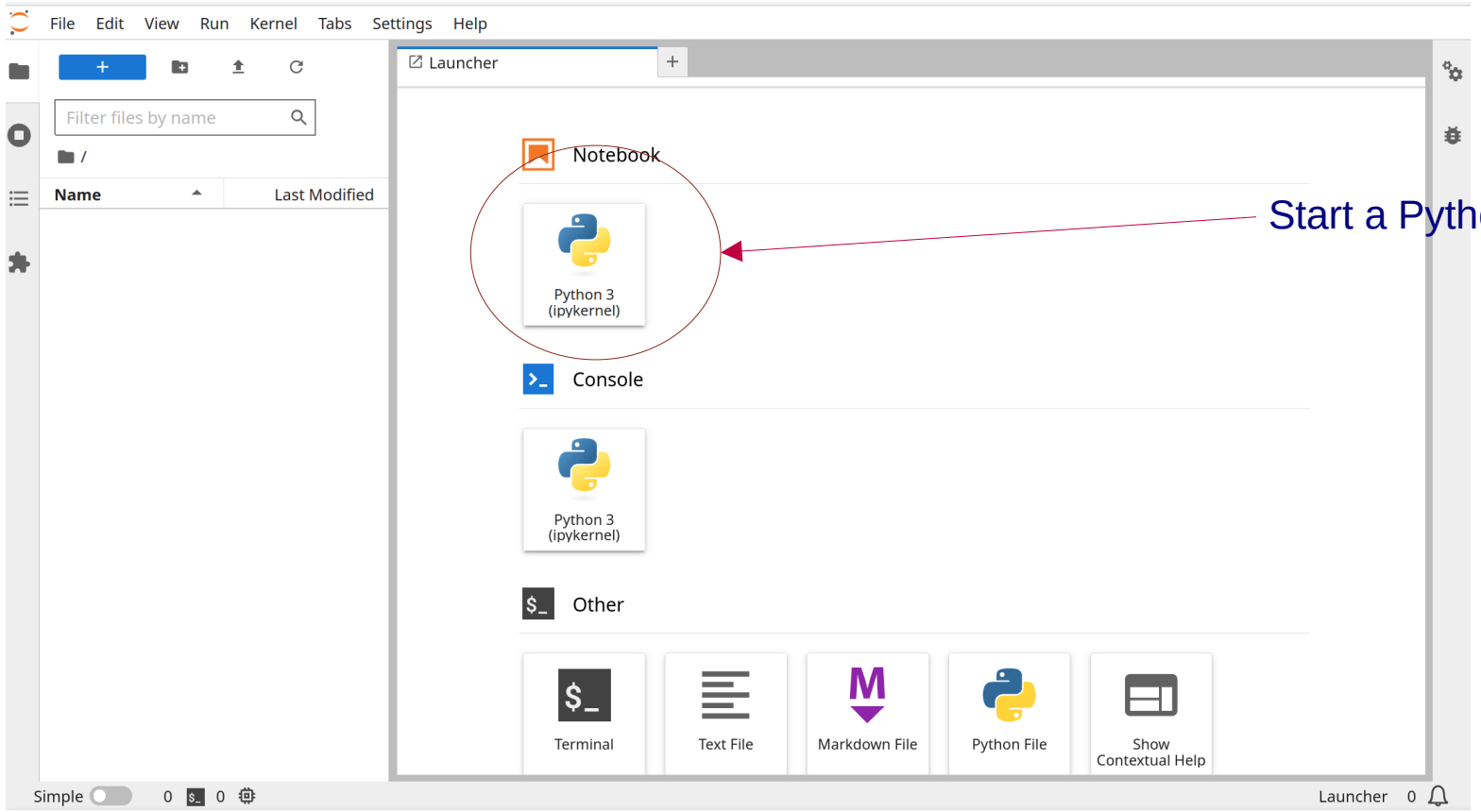
Name of the active environment

Start JupyterLab

- Start JupyterLab

```
jupyter-lab
```

- This should start a browser with JupyterLab



You are ready to use JupyterLab and create Python programs!

Have fun!