

0 – Setting up JupyterLab (Conda) on Linux

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Scientific Programming / Wissenschaftliches Programmieren in Python (2024)

<https://atticlectures.net/scipro/python-2024/>

Install Conda (Miniconda) on Linux

- Download the [latest Miniconda installer \(Miniconda3 Linux 64-bit\)](#)
- Start the downloaded Miniconda installer (in a command terminal)

```
cd Downloads  
bash Miniconda3-latest-Linux-x86_64.sh
```

```
Welcome to Miniconda3 py312_24.1.2-0  
  
In order to continue the installation pro  
agreement.  
Please, press ENTER to continue  
>>> 
```

Press ENTER and then repeatedly SPACE, finally enter “yes” to accept it (and ENTER)

```
- Press ENTER to confirm the location  
- Press CTRL-C to abort the installation  
- Or specify a different location below  
  
[/home/aradi/miniconda3] >>> 
```

Accept default installation destination

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

Press Enter

Set up Conda working environment

- Activate conda from a terminal

```
source ~/miniconda3/bin/activate
```

- Update Conda (in case newer version is available)

```
conda update conda
```

```
Anaconda Prompt (miniconda3) - conda update conda
(base) C:\Users\aradi>conda update conda
Collecting package metadata (current_repodata.json): done
Solving environment: -
```

```
The following NEW packages will be INSTALLED:

boltons                pkgs/main/win-64::boltons-23.0.0-py310haa95532_0
jsonpatch              pkgs/main/noarch::jsonpatch-1.32-pyhd3eb1b0_0
jsonpointer            pkgs/main/noarch::jsonpointer-2.1-pyhd3eb1b0_0
packaging              pkgs/main/win-64::packaging-23.0-py310haa95532_0

The following packages will be UPDATED:

conda                  23.1.0-py310haa95532_0 --> 23.3.1-py310haa95532_0
cryptography          38.0.4-py310h21b164f_0 --> 39.0.1-py310haa95532_0
openssl               1.1.1s-h2bbff1b_0 --> 1.1.1t-h2bbff1b_0
pyopenssl             pkgs/main/noarch::pyopenssl-22.0.0-py~ --> pkgs/main/noarch::pyopenssl-23.0.0-py310haa95532_0
requests              2.28.1-py310haa95532_0 --> 2.28.1-py310haa95532_0
sqlite                3.40.1-h2bbff1b_0 --> 3.41.1-h2bbff1b_0
tqdm                  4.64.1-py310haa95532_0 --> 4.65.0-py310haa95532_0
tzdata                2022g-h04d1e81_0 --> 2023c-h04d1e81_0
urllib3               1.26.14-py310haa95532_0 --> 1.26.15-py310haa95532_0
zstandard             0.18.0-py310h2bbff1b_0 --> 0.19.0-py310haa95532_0

Proceed ([y]/n)? y
```

Set up Conda working environment

- Create a special environment for all the course related stuff

```
conda create -n scipro
```

```
(base) C:\Users\aradi>conda create -n scipro
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\Users\aradi\miniconda3\envs\scipro

Proceed ([y]/n)? y
```

- 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 ~/miniconda3/bin/activate scipro
```

Set up Conda working environment

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

```
conda install jupyterlab
```

```
(scipro)  
noys:~/ramdisk  
[2007]> conda install jupyterlab
```

Name of the active environment

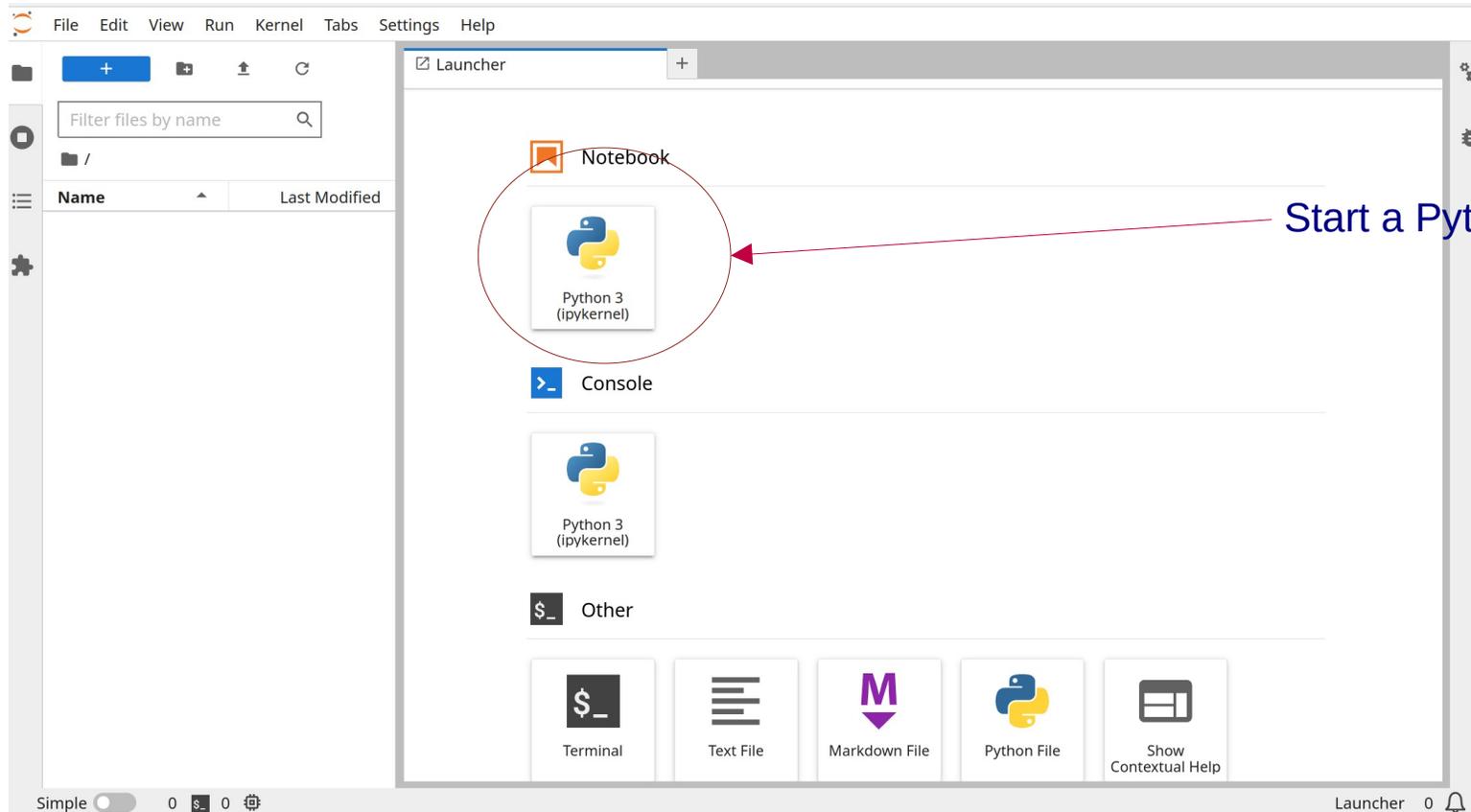
Start JupyterLab

- Start JupyterLab

```
jupyter-lab
```

```
(scipro) C:\Users\aradi>jupyter-lab  
[I 2023-04-10 17:41:08.939 ServerApp] jupyterlab | extension was successfully linked.  
[I 2023-04-10 17:41:08.955 ServerApp] nbclassic | extension was successfully linked.
```

- This should start a browser with JupyterLab



Start a Python 3 notebook

You are ready to use JupyterLab and create Python programs!

Have fun!