

# 0 – Setting up JupyterLab (Conda) on Windows

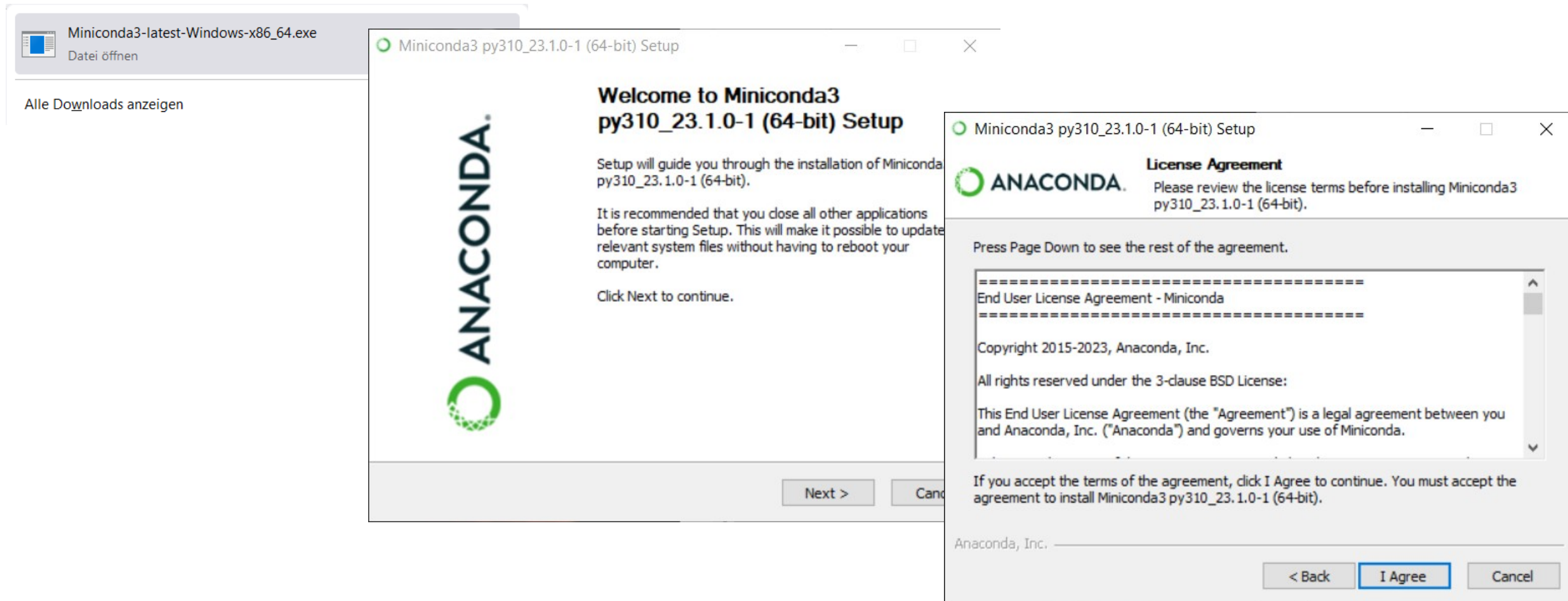
Bálint Aradi

**Scientific Programming / Wissenschaftliches Programmieren in Python (2024)**

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

# Install Conda (Miniconda) on Windows

- Download the [latest Miniconda installer \(Miniconda3 Windows 64-bit\)](#)
- Start the downloaded Miniconda installer



# Install Conda (Miniconda) on Windows

**Miniconda3 py310\_23.1.0-1 (64-bit) Setup**

**ANACONDA.** **Select Installation Type**  
Please select the type of installation you would like to perform for Miniconda3 py310\_23.1.0-1 (64-bit).

Install for:

- Just Me (recommended)
- All Users (requires admin privileges)

Destination Folder  
C:\Users\aradi\miniconda3

Space required: 242.9 MB  
Space available: 20.6 GB

**ANACONDA.** **Choose Install Location**  
Choose the folder in which to install Miniconda3 py310\_23.1.0-1 (64-bit).

**ANACONDA.** **Advanced Installation Options**  
Customize how Miniconda3 integrates with Windows

- Create start menu shortcuts (supported packages only).
- Add Miniconda3 to my PATH environment variable  
NOT recommended. This can lead to conflicts with other applications. The Command Prompt and Powershell menus added to the Windows Start menu will not be updated.
- Register Miniconda3 as my default Python 3.10  
Recommended. Allows other programs, such as VSCode, PyCharm, and JupyterLab to automatically detect Miniconda3 as the primary Python 3.10 interpreter.
- Clear the package cache upon completion  
Recommended. Recovers some disk space without harming functionality.

**ANACONDA.** **Completing Miniconda3 py310\_23.1.0-1 (64-bit) Setup**

Thank you for installing Miniconda.

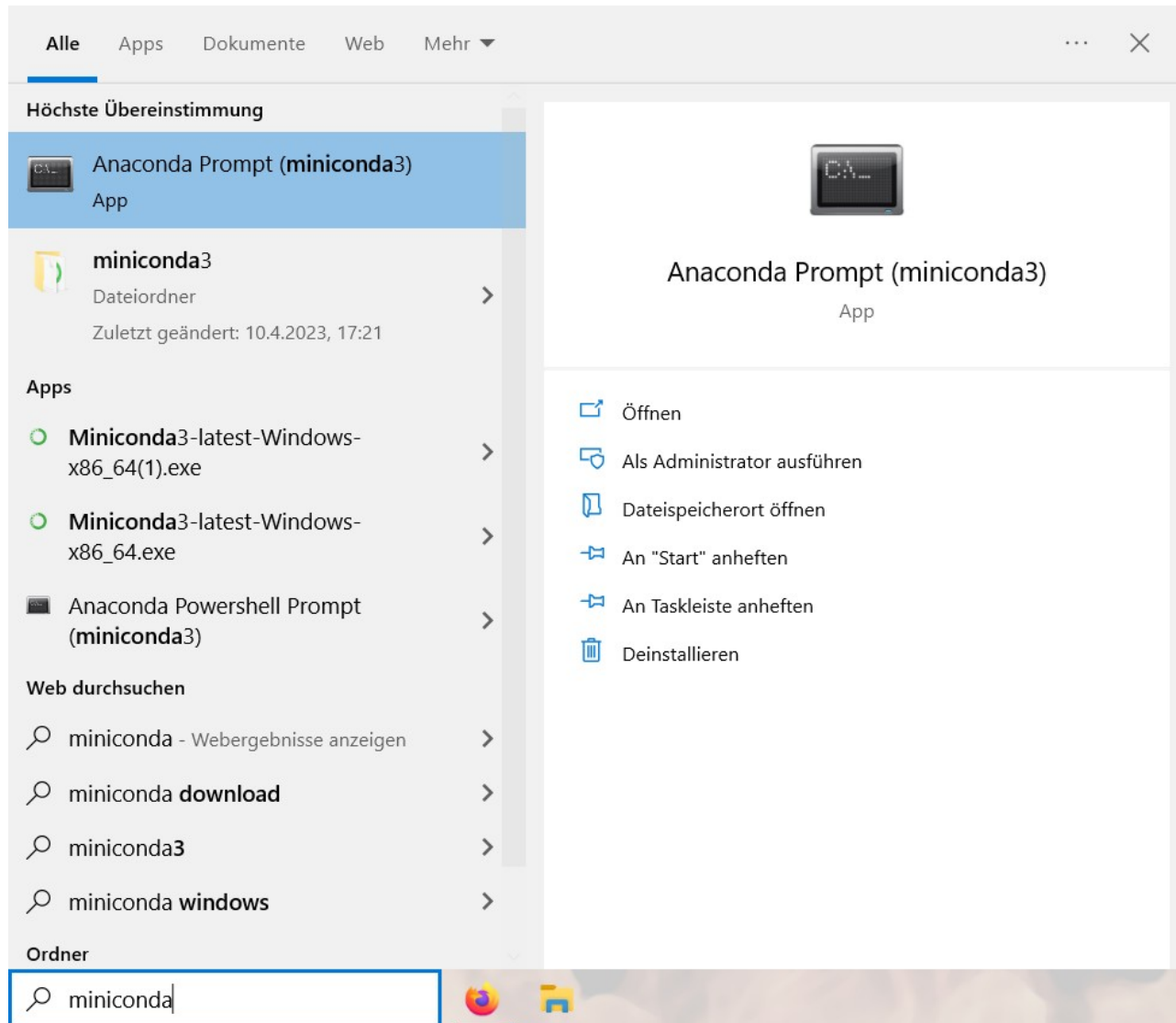
Here are some helpful tips and resources to get you started. We recommend you bookmark these links so you can refer back to them later.

- Getting started with Conda
- Welcome to Anaconda

< Back Finish Cancel

# Set up Conda working environment

- Start the Anaconda prompt (= command line terminal with initialized Conda environment)



# Set up Conda working environment

- 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-py310haa95532_0 --> pkgs/main/noarch::pyopenssl-23.0.0-py310haa95532_0
requests              2.28.1-py310haa95532_0 --> 2.28.1-py310h21b164f_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-py310h2bbff1b_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 start the Anaconda prompt, you should activate this environment with the command above in order to access the installed programs.
- You might create further environments to host other software collections for other projects.

# Set up Conda working environment

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

```
conda install jupyterlab
```

```
(scipro) C:\Users\aradi>conda install jupyterlab  
Collecting package metadata (current_repodata.json): \
```

Name of the active environment

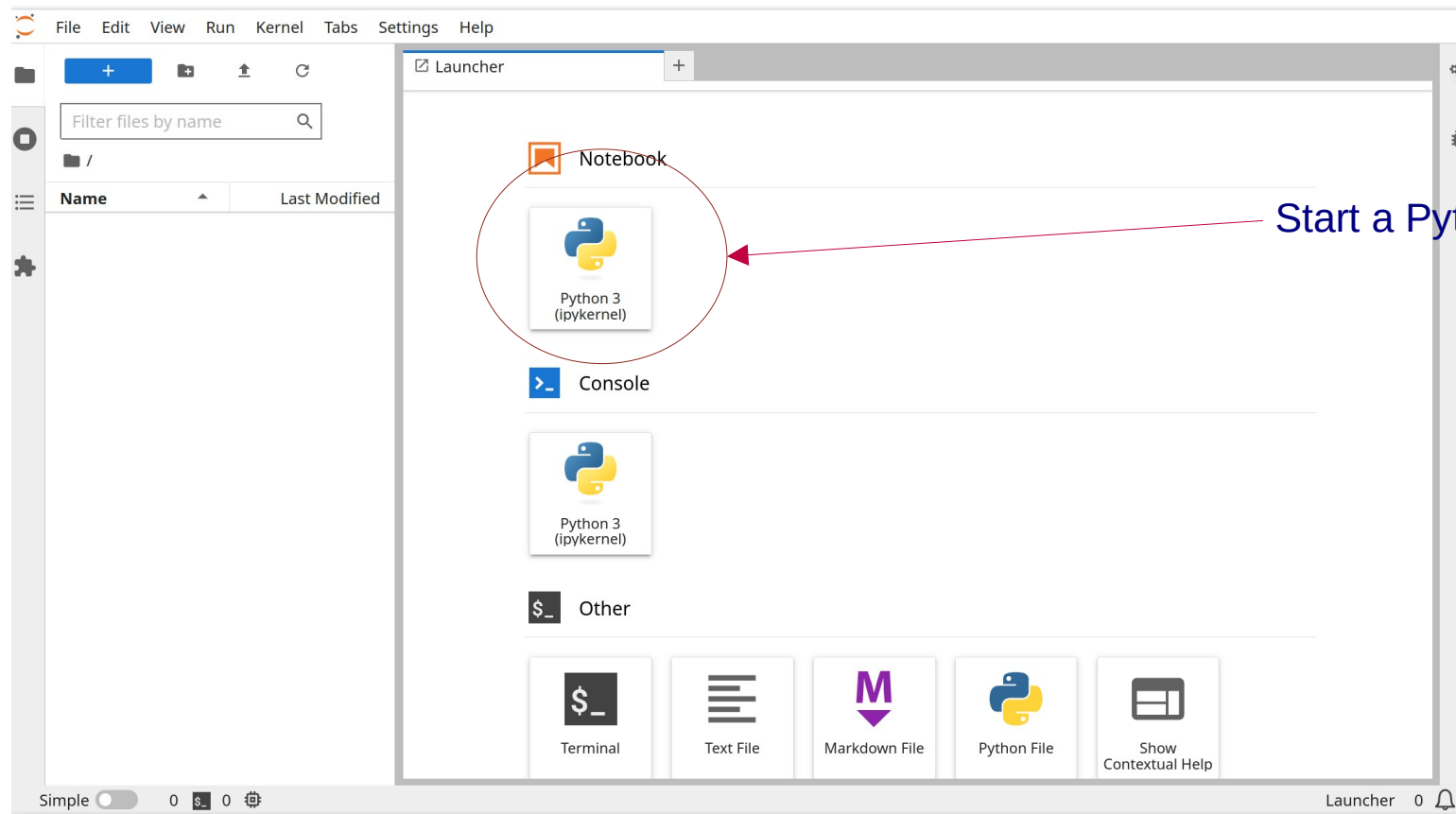
# Start JupyterLab

- 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!**