Setting up python environment
for spike postprocessing scripts

Download and install Miniconda
Not necessary if you already have Anaconda installed. Miniconda is just a minimalistic version of Anaconda - so the download and install should be faster.

Link to installers:
https://docs.conda.io/en/latest/miniconda.html#latest-miniconda-installer-links

Also - make sure you have git installed (if you have Github Desktop you should be fine).

Install pylabianca environment
Instead of installing all the necessary packages yourself, you need just one environment description file that you will use to install all the packages in one step. This file is named environment.yml and can be found on our pylabianca repository:
https://github.com/labianca/pylabianca/blob/main/environment.yml
(this is a description of key packages from the environment I (mmagnuski) have on my computer)

You first need to download this file. The easiest way to do it from github (apart from cloning the whole repository) is to right click on the "Raw" button and choose "Zapisz element docelowy jako" (Firefox) / "Zapisz link jako" (Chrome):
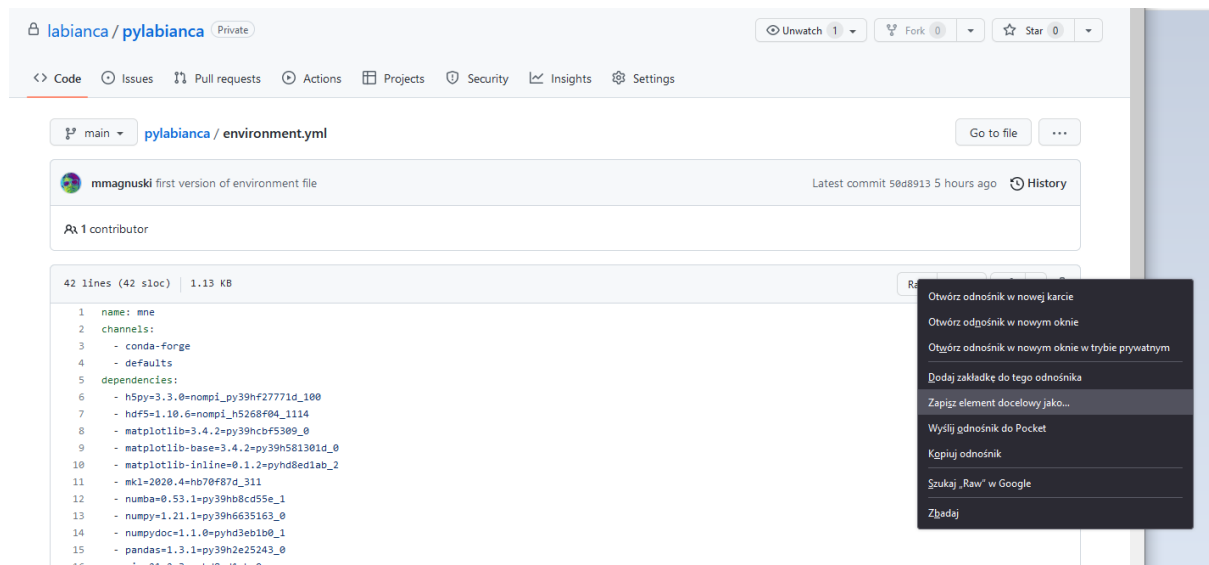
Chrome has a tendency to save such files as .txt although the extension is different. Let it do so and correct the extension by hand (renaming the file) in the directory where you saved it to. Firefox should be able to save the file with the correct extension (.yml). In my case it looks like this:
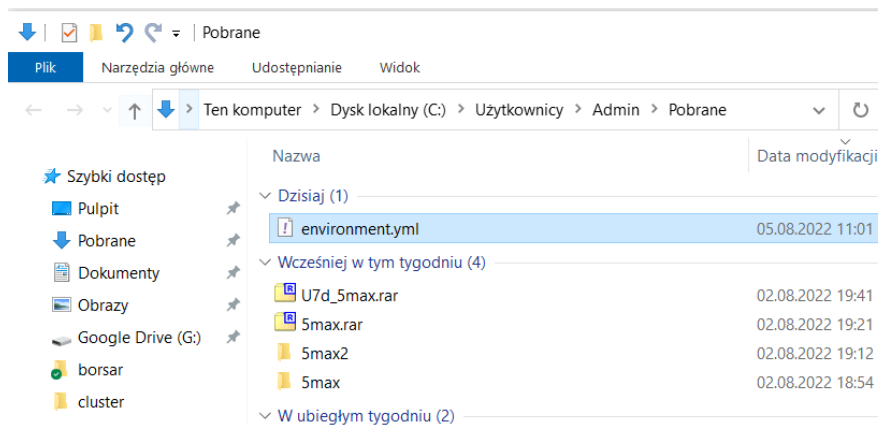
Remember where you save the file to as you will have to go there using the console and run the installation.

Don't do as in the screenshot above - **don't keep the environment file in your Downloads folder**. Some github packages will be downloaded to the folder with the environment file so make sure that the directory you place the environment file in is ok for it to stay there.

To install the environment using the environment.yml file:

1. Click on the address bar of the file explorer and copy the path (again, it's best **not to use Downloads directory**)
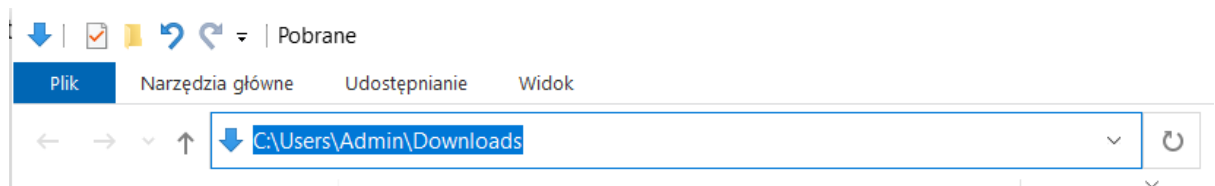
2. open the console (for example by typing "cmd" in the Windows start menu)

3. write "cd " in the console and paste the copied path there (pasting text into the console via ctrl+v may not work as expected on some older Windows versions, try using the mouse context menu then or right click on the console top bar and choose edit->paste)

    (BTW, you won't see the "(mne)" part in your console)

4. once you are in that folder you can start the installation, you just need to type:
    `conda env create -f environment.yml`
    (if conda commands don't work in your console open Anaconda prompt instead and go back to step 3)

5. Be patient, this may take some time, all the packages specified in the environment file (and their dependencies) are downloaded, verified and installed. Towards the end you will see:

```
done
#
# To activate this environment, use
#
#     $ conda activate pylabianca
#
# To deactivate an active environment, use
#
#     $ conda deactivate
```

Verify that your environment works

To verify that all went well, you can check the Windows start menu and look for "Spyder (pylabianca)" application. If you are able to run it and then import pylabianca by typing:
`import pylabianca as pln`
(and enter) in the Spyder console in lower right without any errors you should be good.

If, for some reason, you have problems running Spyder you can also check the environment from the console:

1. type `conda activate pylabianca` to activate the environment
2. you should now see (pylabianca) at the line start in the console
3. type `python` to start python
4. type `import pylabianca as pln`
5. hopefully, you see no errors
6. you can exit python and go back to the console by typing `quit()`

Congrats, you have set up the python environment for running some of our lab scripts!