1 How to install Spyking Circus in an Anaconda environment

1.1 Install Anaconda

Download Anaconda from https://www.anaconda.com/download/.

Install Anaconda, for GNU/Linux it looks like:

```
bash Anaconda3-<version>.sh
```

To create an anaconda environment that can run spyking circus, run the following commands.

```
conda env create --name spyking --file spyking_env.txt

conda activate spyking # Do this for every new shell

conda install -c conda-forge -c spyking-circus spyking-circus

pip install spyking_requirements.txt
```

2 Files

2.1 template.params

This file specifies all parameters for a single hdf5 file. The template version is a starting point that works well with the MEA 60 we've used in NTNU Cyborg.

2.1.1 Usage

Change `mapping` under `[data]` to the path to the `mea_60.prb` file.

For each hdf5 file you want to analyze, copy this file so that it matches the name of your hdf5 file (without extension). E.g. `spiky.h5` and `spiky.params`.

More documentation on the file format in spyking circus' documentation.

2.2 `mea_60.prb`

A probe file that specifies the layout of the electrodes on the 60EcoMEA. Radius of 50 μm and spacing between the electrodes is 700 μm.

3 Running the launcher GUI

To run the GUI to view previews and produce results, run:

```
spyking-circus-launcher
```

4 Viewing clusters etc. in Phy.

4.1 From `spyking-circus-launcher`

Select the `Converting` option in the `Tasks` choices and `Run` it.

Select the Data file and go to the `View results` tab. Choose `Phy GUI` and click `Run` to start the Phy GUI.

4.2 Terminal

Convert files and start the Phy GUI:

```
spyking-circus <h5_file> -m converting -c 4 # 4 = number of CPUs
circus-gui-python <h5_file>
```

5 Terminal cheat sheet

```
spyking-circus -p <h5_file> # Preview of h5_file
spyking-circus -m clustering <h5_file> # Simple clustering
spyking-circus -r <h5_file> # Show results
```