Knowledge for the installation of pyzebra on personal computers

This document is meant to provide instructions for users on how to install/use pyzebra.
The best way to get pyzebra to work on a personal computer, assuming that there is no need to modify the source code, is 'conda install'.

When there are many packages installed via conda, it becomes increasingly more difficult to satisfy dependencies for all of them. To solve this problem, conda has a concept of environments, where packages can be installed in isolation. This way `solving environment failed' has lower probability to happen. Therefore, it is recommended to install pyzebra in a new environment, which is the procedure described below.

COMMANDS FROM A UNIX TERMINAL:

```
$ conda create --name pyz python=3.9
$ conda activate pyz
$ conda config --add channels conda-forge
$ conda config --add channels paulscherrerinstitute
$ conda install -c paulscherrerinstitute pyzebra
```

One can use any other name instead of `pyz`.

Now that pyzebra is installed in your new conda environment, simply activate the environment and start pyzebra:

```
$ conda activate pyz
$ pyzebra
```

Wait a few seconds so that the webserver starts, it can then be accessed via http://localhost:5006 from a web browser.

Note that this webserver is not an identical version of pyzebra.psi.ch as can be accessed from the PSI network, because of missing external dependencies for panels like 'hdf anatric' (integration of intensities for area detector data), 'spind' (indexing for area detector data), and 'ccl prepare' (generate calculated lists of reflection). However, for the locally installed version of pyzebra brings all functionalities that are typically need for data treatment after an experiment like 'hdf viewer' (visualization of area detector data), 'ccl integrate' (integration of data collections), 'ccl compare' (comparison of two data collections) and 'param study' (generation of summary plots from a series of *.dat files acquired as a function of an external parameter).

For help with conda, this cheatsheet could be useful:
https://docs.conda.io/projects/conda/en/4.6.0/_downloads/52a95608c49671267e40c689e0bc00ca/conda-cheatsheet.pdf