# A napari FF-SRM plugin for advanced microscopy image processing.

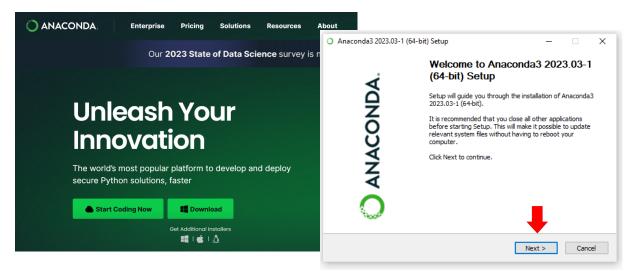
## 1. Installation process.

Review the system requirements before installing Anaconda Distribution. Select the installers for your computer's operating system:

https://docs.anaconda.com/free/anaconda/install/index.html

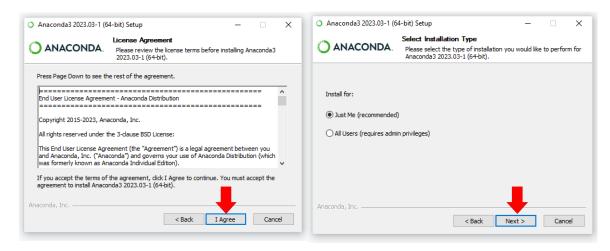
## 1.1 Installing Anaconda on Windows.

- 1) Download the Anaconda installer from <a href="https://www.anaconda.com/">https://www.anaconda.com/</a> (fig. 1, left).
- 2) Go to the "Downloads" folder and double-click the installer to launch.
- 3) Click "Next" on the Setup window (fig. 1, right):



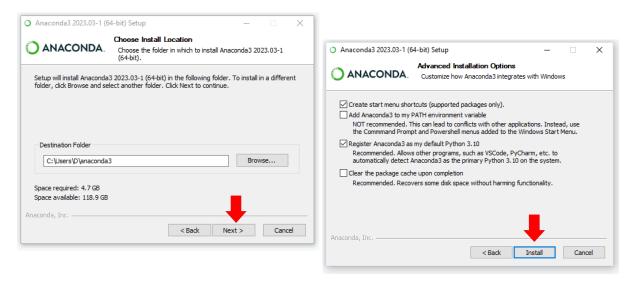
**Figure 1.** Installation windows for Anaconda Distribution. *Left*: Anaconda webpage. *Right*: Anaconda's setup window.

- 4) Read the licensing terms and click "I Agree" to continue (fig. 2, left).
- 5) It is recommended to install the program using the "Just Me" option, which will be limited to the current user account. However, if you wish the program available for all accounts on the computer, select "All Users". Please note that selecting the latter option will require Windows Administrator permissions. Click "Next" (fig. 2, right):



**Figure 2.** Anaconda installation Setup. *Left*: License agreement. *Right*: Anaconda's installation type.

- 6) Select an installation location (Destination Folder) and click "Next" (fig. 3, left).
- 7) Choose wheter to add Anaconda. It is recommended to register Anaconda software as your default Python because adding it to your PATH environment can interfere with other software. Click "Install" (fig. 3, right):



**Figure 3.** Anaconda installation Setup. *Left*: Installation location. *Right*: Anaconda's advanced installation options.

- 8) If you want to watch the packages Anaconda is installing, click "Show details". Click "Next".
- **9)** After a successful installation you will see the "**Thanks for installing Anaconda**" dialog box.
- **10)** Click the "Finish" button and verify the installation.



Figure 4. Anaconda installation Setup. Left: Installation details.

#### 1.2 Installing Napari.

Napari is a fast, interactive and multi-dimensional image viewer for Python. To select which distribution to install and further details visit: <a href="https://napari.org/stable/">https://napari.org/stable/</a>.

For those familiar with Python, Napari can be installed on most macOS, Linux, and Windows systems using pip:

1) First install napari viewer: It is highly recommended to install napari into a clean virtual environment using an environment manager like <u>conda</u> or <u>venv</u>. For example, with conda:

conda create -y -n napari-env -c conda-forge python=3.9 conda activate napari-env pip install "napari[all]"

2) Open Napari from command line:

Once installed, simply run napari

For further information visit: <a href="https://napari.org/stable/tutorials/fundamentals/quick\_start.html">https://napari.org/stable/tutorials/fundamentals/quick\_start.html</a>

#### 1.3 Installing napari-superres plugin.

1) When starting Napari, it will display the following window on the screen:

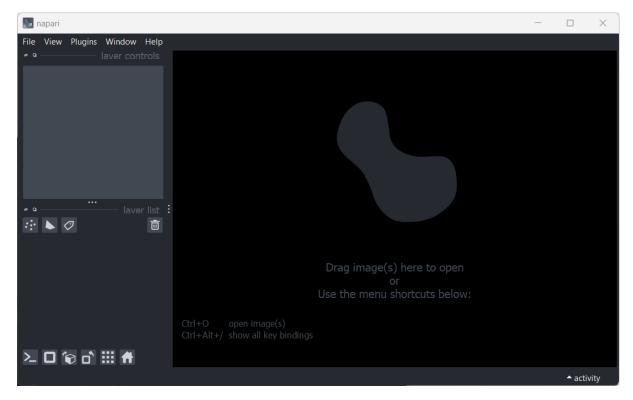


Figure 5. Napari's software window.

2) Select the "Plugins" Menu. Click the "Install/Uninstall Plugins" option (fig. 6).

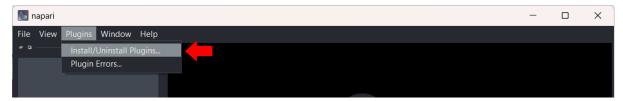
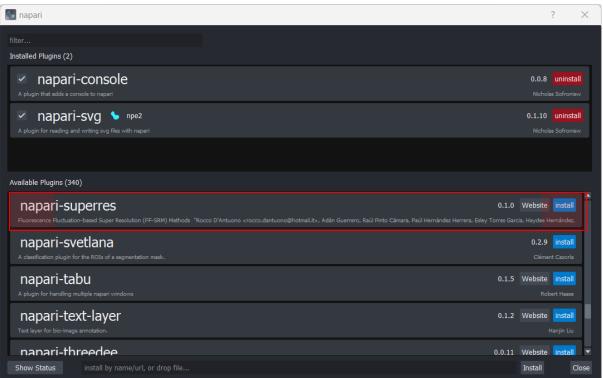


Figure 6. Napari installation plugin menu.

3) Install napari-superres.

Simply search for the "napari-superres" plugin in the plugin install package interface and click install (fig. 7).

GitHub that contains the beta version of MSSR: https://github.com/RoccoDAnt/napari-superres



**Figure 7.** Search for the "napari-superres" (red rectangle) in the **Available Plugins** Napari menu to install.

**4)** Click "Install" and monitor the installation by clicking on **Show Status** option (fig. 8):

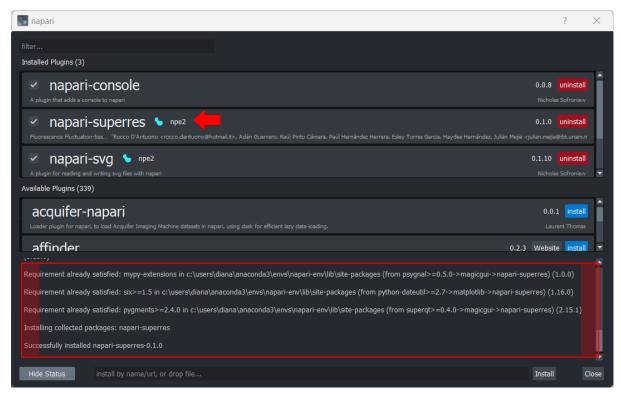


Figure 8. Napari-superres plugin installation process on Napari.

5) Once the plugin has been successfully installed, restart Napari and on the "Plugins" menu it will appear the napari-superres option and the following menu:

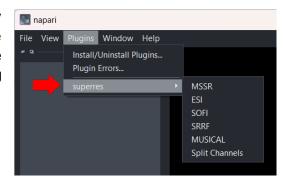


Figure 9. Napari-superres plugin installed on Napari.