Contribution ID: 9

Intermediate: Introduction to Napari

Thursday 22 September 2022 10:00 (4 hours)

It is recommended to take a Python-Basics Course before. For example from the first week of this Summer Academy.

In this course we will introduce image processing with Python, Jupyter lab and Napari. Students will learn how to process images interactively in Napari and afterwards how to replicate the same results in Jupyter notebooks. Additionally, the students will get an idea how to export tables of measurements and plot results in Jupyter notebooks. The notebooks can then be conserved and allow reproducible image data science mid-/long-term. We will use Python libraries such as numpy, scipy, scikit-image, pandas and matplotlib. Furthermore, GPU-accelerated image processing using pyclesperanto for processing 3D data will be introduced as well.

Attendees who attend the course should go through the installation instructions provided on this website:

https://www.napari-hub.org/plugins/devbio-napari#installation

In case of issues with the installation, attendees can reach out any time –before the course - by opening a thread on https://image.sc and tagging @haesleinhuepf. Or **consider joining the session at 9:30 to solve installation issues**.

This course is an excelent follow up to the lecture series Imaging - from Organisms to Molecules runing this summer term. **Participants of the lecture will be given preference in participation.**

 \rightarrow Register here \leftarrow

Maximum number of participants

unlimited

Previous experience

Phython basics.

Target audience

Researcher from Biology, Chemistry, Physics, Engineering, Computer Science, Mathematics with an affinity to Imaging

Learning target

how to process images interactively in Napari, how to replicate the same results in Jupyter notebooks, how to export tables of measurements and plot results in Jupyter notebooks. GPU-accelerated image processing using pyclesperanto for processing 3D data will be introduced as well

Presenters: HELMHOLTZ IMAGING; HAASE, Robert (TU Dresden) **Session Classification:** Workshops (Helmholtz Imaging)

Track Classification: Intermediate