Using Jupyter Notebooks

Riccardo Murri <riccardo.murri@uzh.ch>,
Joel Lüthi <joel.luethi@uzh.ch>
Pelkmans Lab,
University of Zurich

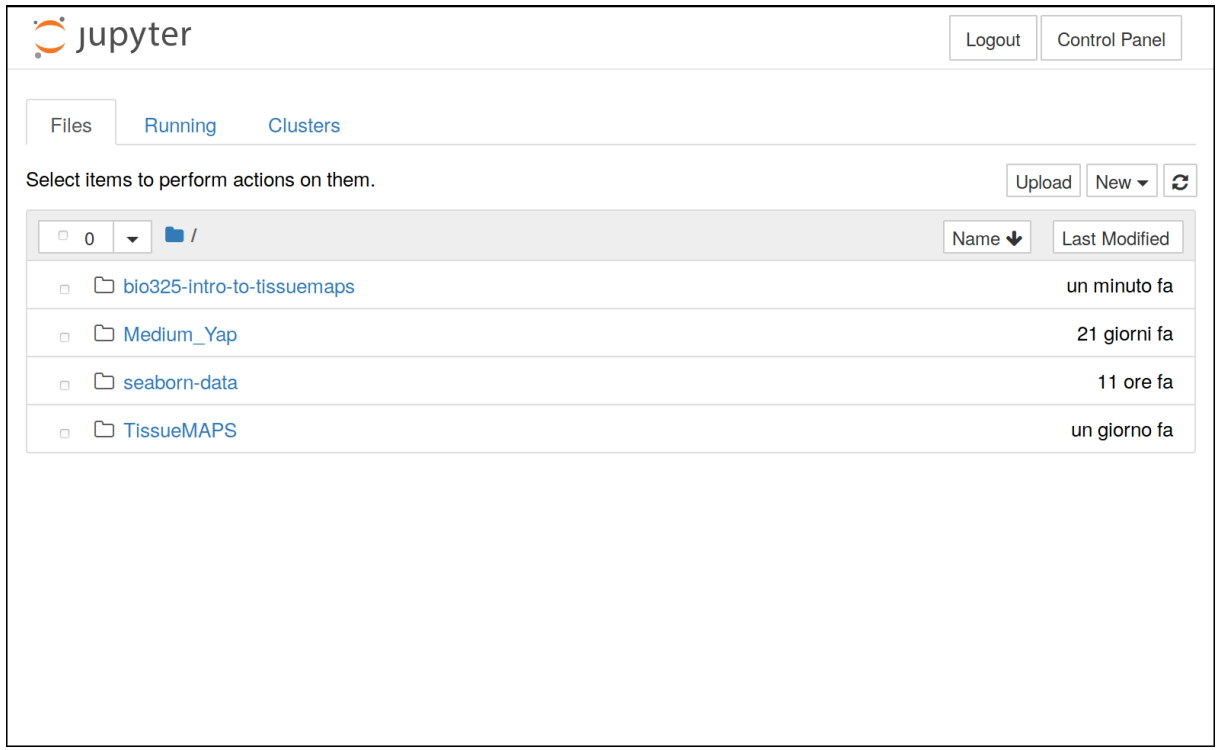
October 11, 2018

Outline of the rest of the day

- 9:20 – 10:00 Upload data to TissueMaps & start processing it
- 10:20 – 11:30 Image processing & cell segmentation in TissueMaps
- 12:30 – 13:15 Using machine learning & downloading data
- 13:30 – 14:00 Intro to Python
- 14:00 – 14:45 Data processing
- 14:45 – 15:00 Discussing data processing
- 15:15 – 16:00 Plotting data
- 16:00 – 16:30 Discussing plotting & wrap up

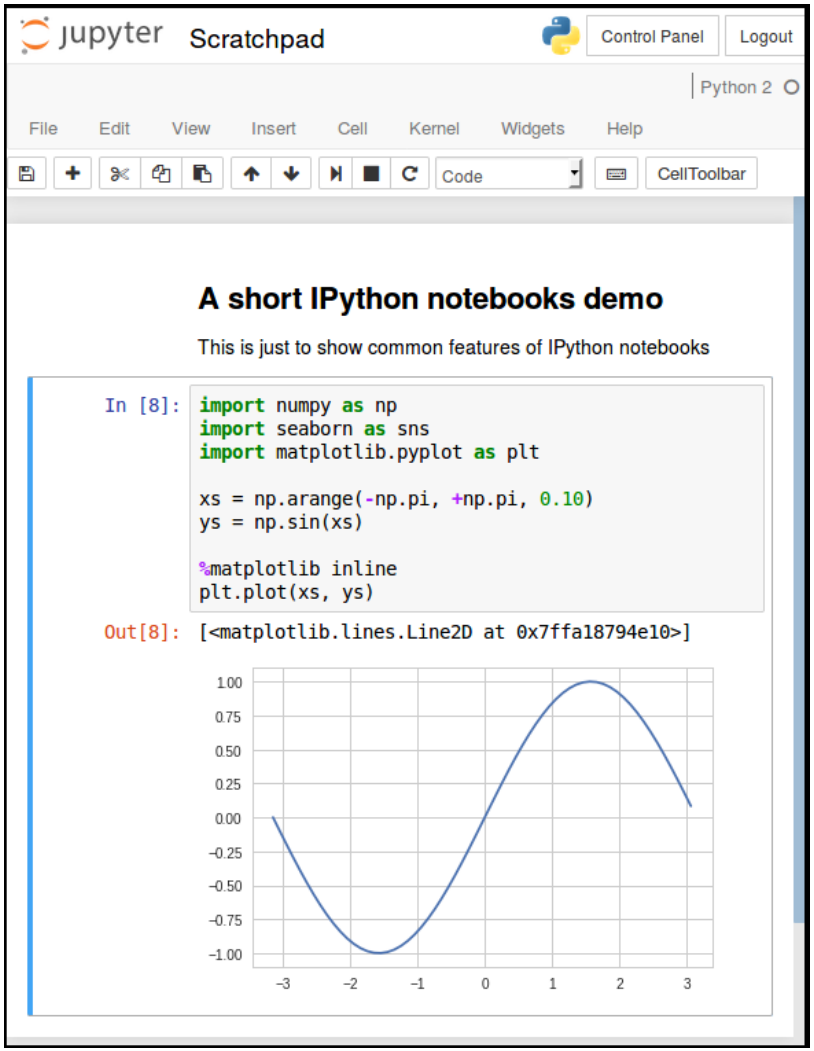
Jupyter Notebook server

`http://172.23.X.Y:2000/`



Click on the `python-basics.ipynb` to start.

The IPython notebook, I



A convenient way of interacting with Python is through the IPython notebooks.

Notebooks are made of "cells", which come in two flavors:

- documentation cells, containing text formatted according to the Markdown conventions;
- code cells, containing arbitrary Python code

The IPython notebook, II

To run Python code in the notebook:

- Type your code in a cell besides the `In [ ]:` (multiple lines are allowed)
- Press **Ctrl+Enter** to evaluate the cell (prompt changes to `In [*]:`) — or press **Alt+Enter** to evaluate the code *and* open a new code cell.
- When the Python kernel has done computing, the result appears *under* the code cell marked with a `Out [ ]:` label.