

# Python for Data Analysis

*Dr. Alexander Britz*

In the workshop “Python for Data Analysis” the participants learn the most fundamental skills for analyzing (large) scientific data sets using Python and Jupyter Notebooks. The workshop consists of a series of modules, each having a lecture and exercise part. In the exercises, the participants are encouraged to work on their own data sets, if applicable. The specific content of the course is:

- Virtual environments
- Version control with Git & Github
- Handling data with Numpy
- Treating larger data sets with Pandas
- Visualization of data with Matplotlib
- Interpolation, fitting and filtering of data
- Bonus (if time allows): Introduction to parallel computing with Dask

As a pre-requisite, the participants should have a basic knowledge of Python, e.g. as acquired in a “Python-Basics” course.