

Some python related issues which deserve to be mentioned:

- **jupyter**

A software environment which integrates `ipython` with an HTML code generator to build interactive dynamical web pages where you can have text, math expressions, images and python code.

- **cython**

“Cython is Python with C data types”. You write python code, add C declarations for selected objects, compile everything and get a fast python module to use in your procedures.

- **anaconda**

A python distribution which includes a package manager (**conda**). It simplifies the installation and maintenance of various version of python with its packages.

Bibliography

- 1 **The Official Python Tutorial.**
<https://docs.python.org/3/tutorial>
<https://docs.python.org/2.7/tutorial>
- 2 **Python for Data Analysis.** Wes McKinney, O'Reilly.
The book covers advanced Python tools for data analysis applications, including: IPython, NumPy, Matplotlib
- 3 **Python Scripting for Computational Science,** H. P. Langtangen, University of Oslo.
Includes an extended introduction to Python as general purpose programming language also covering advanced tools, but (at least the version I could find) is somewhat outdated.
- 4 **Guide to NumPy,** Travis E. Oliphant.
A fairly complete guide to NumPy. The older 2006 version is freely available in PDF format; second edition (2015) is at the time of my writing only available as printed book.
- 5 **Python Crash Course,** Eric Matthes, No Starch Press.
A thorough introduction to Python language; includes the description of some software projects, even complex ones. A section is devoted to data analysis and visualization.
- 6 **Dive Into Python 3,** Mark Pilgrim.
A classic advanced manual for Python 3. Available on-line.
- 7 **Python. Guida completa,** Marco Buttu, Digital Life Style.
A good general Python book in Italian which deals also with some formal aspects of the language. The author is a colleague from Cagliari Observatory.

Web resources

- 1 <https://www.python.org>
The official place for Python. Do start from here!
- 2 <https://www.python.it>
The official place for the Italian Python community.
- 3 <https://pypi.python.org>
PyPI - the Python Package Index.
- 4 <http://www.numpy.org>
The home of Numerical Python.
- 5 <http://www.scipy.org>
The home of Scientific Python.
- 6 <http://www.astropy.org>
The home of Astropy, the astronomical “ecosystem of interoperable astronomy packages”.