

Jupyter Notebooks

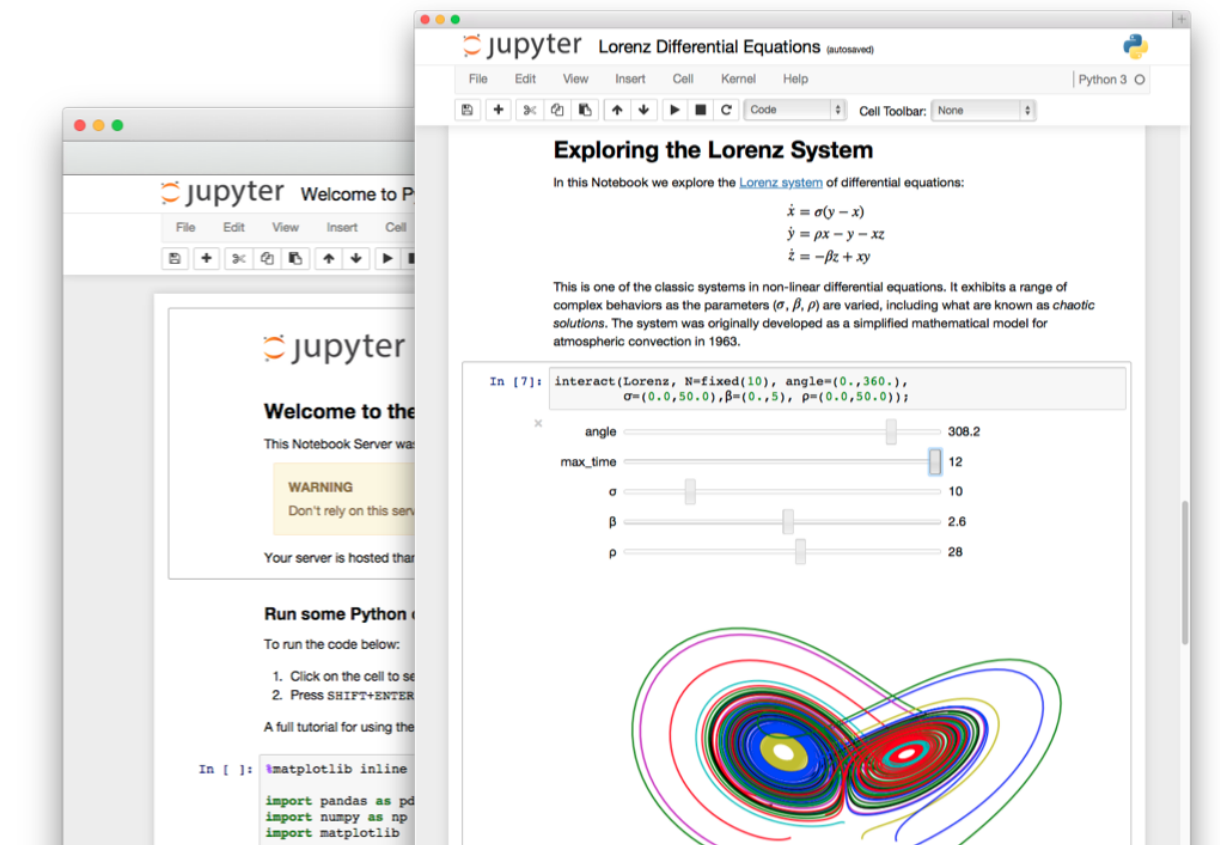
Today, electronic documents do not offer much more than their paper versions, except maybe an easier diffusion. They are generally PDF.

We can do better than that!

Interactive **Jupyter Notebooks** documents:

- Rich hypertext: links, tables, images, charts, videos... ..
- Live code, interactive widgets.

Jupyter Notebooks are interactive documents: try.jupyter.org (<http://try.jupyter.org>)



0 - Installation

One simple way to install Jupyter on Mac, Windows or GNU/Linux is to download [Anaconda](https://www.continuum.io/downloads) (<https://www.continuum.io/downloads>).

1 - Structure

Jupyter documents are constituted of (mainly) two types of cells:

- Markdown cells (for rich text formatting)
- Code cells (more than 50 languages are supported, including Python, R, BASH, Scala, Ruby, Matlab and Octave)

2 - Adoption

Interactive Notebooks Adoption

- An impulse was given by [Peter Norvig \(Google Research Head\)](http://norvig.com/ipython/) (<http://norvig.com/ipython/>): Notably by [one of his notebooks](http://norvig.com/ipython/Economics.ipynb) (<http://norvig.com/ipython/Economics.ipynb>) on economic disparities.
- Nbviewer allows <http://nbviewer.ipython.org> (<http://nbviewer.ipython.org>) to display notebooks online.
- Through clear position taken by publishers such as PLoS and [Nature](http://www.nature.com/news/interactive-notebooks-sharing-the-code-1.16261) (<http://www.nature.com/news/interactive-notebooks-sharing-the-code-1.16261>).
- Today, interactive notebooks are published [daily](http://nb.bianp.net/) (<http://nb.bianp.net/>) in many disciplines.
- On-line: try.jupyter.org (<http://try.jupyter.org>)

3 - Live examples

- Lorenz Attractor
- Ebooks statistics

4 - Do it yourself

- Install Jupyter or try it online using try.jupyter.org (<http://try.jupyter.org>),
- Discover notebooks on the website [bianp.net](http://nb.bianp.net/) (<http://nb.bianp.net/>); you may open them on your computer or online using [Nbviewer](http://nbviewer.ipython.org) (<http://nbviewer.ipython.org>),
- Prepare a feedback for the group.