Python Workshop - Numerics (February 6, 2018)

**When:** February 6, 2018 (6 - 8 PM)

**Where:** 60 Oxford St. Room 330

**Who is this for:** This is primarily for classes, but beginning researchers might benefit as well.

**What are the topics:**

This tutorial will an introduction to numerics in python via the numpy module. Some of the topics we might cover include:

- Linear algebra
- FFT
- Differential Equations

(visit this page around January 29 for more details and tutorial materials)

**Registration:**

Space is limited. Register by visiting the link below:

https://harvard.az1.qualtrics.com/jfe/form/SV_3gUUNsPp8YWotGB

**Python installation and Jupyter Notebook on your laptop:**

Please install Anaconda python on your laptop before you come to the tutorial:

https://conda.io/docs/user-guide/install/index.html#regular-installation

Running Jupyter Notebook:


Helpful links on Anaconda, ipython notebooks etc:

http://docs.continuum.io/anaconda/faq.html

http://nbviewer.jupyter.org/github/catherinedevlin/mpfwfw_exercises/blob/master/setup.windows.ipynb


**Tutorial Materials**

The rest of this page assumes you have installed Anaconda and the various python binaries are available in a terminal (Mac and Linux) or command prompt (Windows). Download the Ipython Notebooks below and put them in the same directory.

On **Windows**, the simplest option is to put these files in the "Ipython Notebooks" directory in the "My Documents" directory under "Documents" (i.e Documents --> My Documents --> IPython Notebooks).

You can open Ipython Notebook on various OSs as follows:

On **Windows**, start the Ipython notebook using the launcher under Anaconda in the Start Menu.

On **Mac**: 

Double click on the launcher (should be available on the desktop) and choose ipython notebook. In the notebook, navigate to the folder which contains the tutorial notebooks.

On Linux, open a terminal (and on Windows, open a command prompt) and change to the directory where your notebooks are. Then type:

```python
ipython notebook
```

from the directory where you have all the following files (you need to have Anaconda bin directory in the path). Once the ipython server and the browser are up, you will see the files with 'ipynb' extension in the dashboard. Clicking on it will open it.

**Ipython Notebooks for this tutorial:**

visit this page around January 29 for tutorial materials

Tutorial assumes you are familiar with basic python. You can find material on the web (just google) on introductory python. You may also look at the basic python tutorial in the notebook:

`custom.css` — for changing the appearance of the notebook (optional)