

Initial Installations: (Optional, but it is easier for me.)

```
sudo apt-get install synaptic
```

Installing IPython 0.13.2: (This may not be necessary but...)

```
sudo apt-get install ipython
sudo apt-get install ipython-qtconsole
sudo apt-get install ipython-doc
sudo apt-get install ipython-notebook
sudo apt-get install ipython-notebook-common
sudo apt-get install matplotlib
sudo apt-get install matplotlib-doc
sudo apt-get install matplotlib-data
```

Optional: (for displaying maps)

```
sudo apt-get install python-mpltoolkit.basemap-doc
sudo apt-get install python-mpltoolkit.basemap-data
sudo apt-get install python-mpltoolkit.basemap
```

Installing IPython 1.0 (alpha)

```
sudo apt-get install git
sudo apt-get install python-pip
git clone https://github.com/ipython/ipython.git (7)
cd ipython/ (7)
sudo pip install sphinx
sudo apt-get install pandoc (3)
sudo python setup.py submodule (6)
sudo python setup.py install (7)
sudo pip install -e .[notebook] (6)
```

Using IPython Notebook:

To create a new notebook for a slide-show type:

```
ipython notebook
```

If your notebook is written and you want to convert it to a slide-show you will need to display the Cell Toolbar Slideshow. Once the toolbar is showing you need to select what type each cell is going to be. (2)

- - Just render the cell
- Slide This cell is a complete slide
 - Slides transition horizontally.
 - May have Sub-Slides
 - May contain cell Fragments
- Sub-Slide This cell is a sub-slide
 - Sub-Slides transition vertically.
 - May have additional Sub-Slides
 - May contain cell Fragments

- **Fragment** This cell will be revealed within a slide with a down or right arrow
 - The indication that cell Fragments are present is that the arrows are a lighter color than for a normal transition (blue by default)
 - ******(see screen controls)
- **Skip** This cell will be skipped in the slide-show but will remain in the HTML source code.
- **Notes** This cell is only visible as a note to the speaker in the “speaker view” of the slide show.
 - The “speaker view” is not visible in the main browser window but rather as a popup. It can be accessed by pressing “s” when looking at the slide-show.
The “speaker view” has the following in it:
 - A view of the currently displayed cell (which can be controlled)
 - A preview of the next cell (which can also be controlled but is slaved to the current displayed cell)
 - Any notes that were written in the cell(s^{••}) following the current cell
 - A clock with the current time and elapsed time since switching to the “speaker view”.

Using NBConvert:

General form:

```
ipython nbconvert -format [final type] [notebook name]
```

The final types include: ****verify this list accurate**** (5)

- base_html
- blogger_html
- full_html
- latex_base
- latex_sphinx_base
- latex_sphinx_howto
- latex_sphinx_manual
- markdown
- python-pipreveal
- rst

Using Reveal:

The command to turn an IPython notebook, named “Untitled0.ipynb”, into a reveal slide show is: (3)

```
ipython nbconvert -format reveal Untitled0.ipynb
```

This will create a subdirectory called nbconvert_build that has the reveal slide-show of Untitled0.ipynb in it. The file will be called Untitled0.reveal.html.

You should try opening the file in your browser. You will find a static version of your notebook on your screen, just as if you were rendering it at <http://nbviewer.ipython.org/>.

This HTML file cannot be simply viewed in a browser since it has server side animation. You will need to display it with a server, a simple server...

Showing a Slide-show: (1)

Change directories to the newly created nbconvert directory and type the following command:

```
python -m SimpleHTTPServer 8000
```

(What this does is it starts a server program that will interpret the code that was created by nbconvert.)

Now, there should be a line appear on the screen that says something like:

```
Serving HTTP on 0.0.0.0 port 8000 ...
```

That is the URL address where the slide-show is available. To view the slide show, open your browser and type: 0.0.0.0:8000 into the URL bar and your slide-show will begin.

****** Check <http://localhost:8000> (4)

Themes: (2)

If you want the slide-show to have a little more color you can use a different theme. To do this you just need to add the theme to the URL, e.g. 0.0.0.0:8000?theme=sky# *******(test this)

Currently the following themes are available:

- Sky
- Beige
- Serif
- Solarized
- Default
- Moon ****** (may require css mod still)
- Night ****** (may require css mod still)

Note: you can create your own custom css themes too. (8)

Transitions: (2)

The default transitions can be changed as well. This can be done with 0.0.0.0:8000?transition=cube# *******(test this)

- Cube
- Page
- Zoom
- Fade
- None
- Concave
- Default

Overview: (1)

Press ESC to see an overview of the (like zooming out in Google maps). As you move up and down through Sub-Slides in your presentation the view you see in the overview will change. Columns of slides will be shifted up and down to provide you an overview of the state of your presentation.

Pause / Blackout: (1)

Pressing “b” in the slide-show will black out the screen (to grab your audience's attention). Press “b” again to go back to the slide-show.

****Online Hosting** (I don't know if this is the final form.)**

Just like you can view a image of a notebook on line with nbviewer you will be able to view slide-shows online with <http://slideviewer.herokuapp.com/>. Currently the site is just a proof of concept so it is really rough around the edges.

Acknowledgements: (2)

NBConvert uses the reveal.js library.

References

1. http://damianavila.github.io/scipy2013_talks/index.html
2. SciPy 2013 talk by Damian Avila, URL:<http://youtu.be/rBS6hmiK-H8>
3. Min Ragan-Kelley (direct discussion)
4. <https://github.com/hakimel/reveal.js#pdf-export>
5. <http://stackoverflow.com/questions/15998491/convert-ipython-notebooks-to-pdf-html>
6. <https://github.com/ipython/ipython#ipython-productive-interactive-computing>
7. <http://ipython.org/ipython-doc/stable/install/install.html>
8. <https://github.com/hakimel/reveal.js/blob/master/css/theme/README.md>