# matplotlib

## Matplotlib

matplotlib is a python 2D plotting library which produces publication quality figures in a variety of hardcopy formats and interactive environments across platforms. matplotlib can be used in python scripts, the python and [ipython]() shell (ala matlab or mathematica), web application servers, and six graphical user interface toolkits.

matplotlib trys to make easy things easy and hard things possible. You can generate plots, histograms, power spectra, bar charts, errorcharts, scatterplots, etc, with just a few lines of code. For example, to make a histogram of data in x, you simply need to type

```
>>> hist(x, 100)    # use 100 bins
```

For the power user, you have full control of line styles, font properties, axes properties, etc, via an object oriented interface or via a handle graphics interface familiar to matlab users. A summary of the goals of matplotlib and the progress so