ExampleNicePythonFigure

January 12, 2017

```python
In [2]: import numpy as np
        import matplotlib.pyplot as plt
        %matplotlib inline

In [3]: # parameters for plotting

        # aspect ration with the golden number looks good
        phi = 1.618

        # parameters for the size and font
        szFig = 10
        ftSze = 20
        lnWdth = 2

In [6]: array_time = np.arange(0, 2*np.pi, 0.05)
        y_sinus = np.sin(array_time)
        y_cosinus = np.cos(array_time)

        # set the size properties
        plt.figure(figsize=(szFig,szFig/phi))
        plt.rcParams.update({'font.size': ftSze-2})
        # plotting
        plt.plot(array_time, y_sinus, 'o-', color='r', label='sin')
        plt.plot(array_time, y_cosinus, '--', color='b', label='cos')
        # legend, labels etc
        plt.legend(loc=3)
        plt.xlim(0, 2*np.pi)
        plt.ylim(-1, 1)
        plt.xlabel('Time (s)',fontsize=ftSze)
        plt.ylabel('y (no unit)',fontsize=ftSze)

        # save the figure
        name = 'PSDAttenuationSlush.png'
        plt.savefig(name)
```
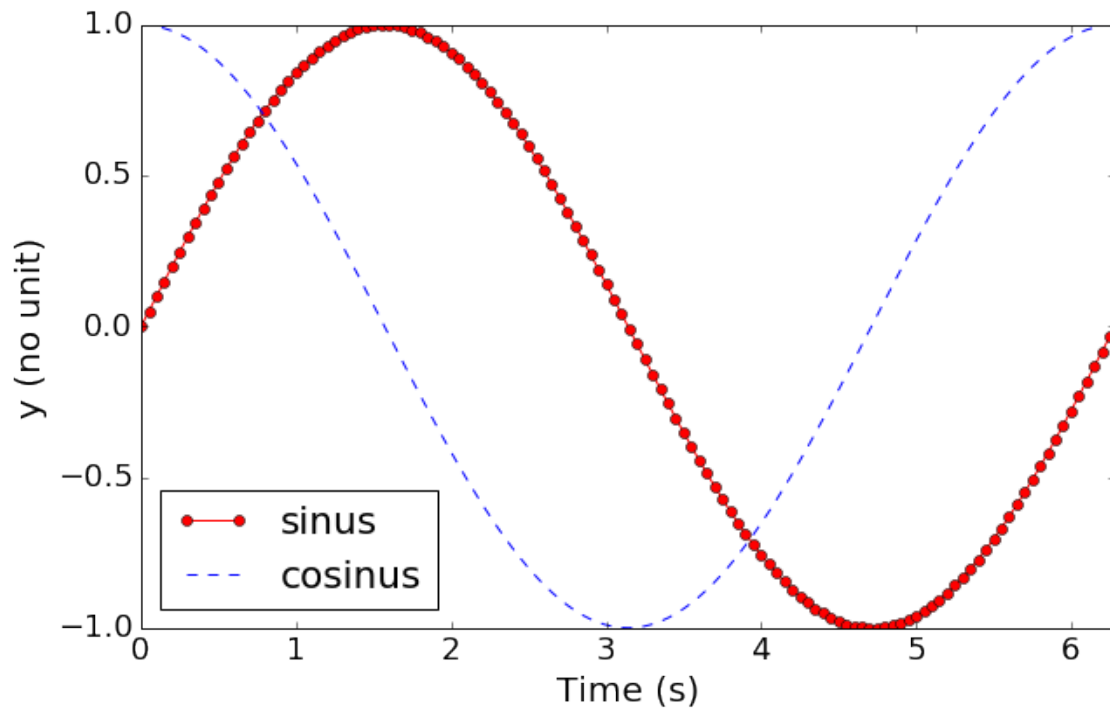
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