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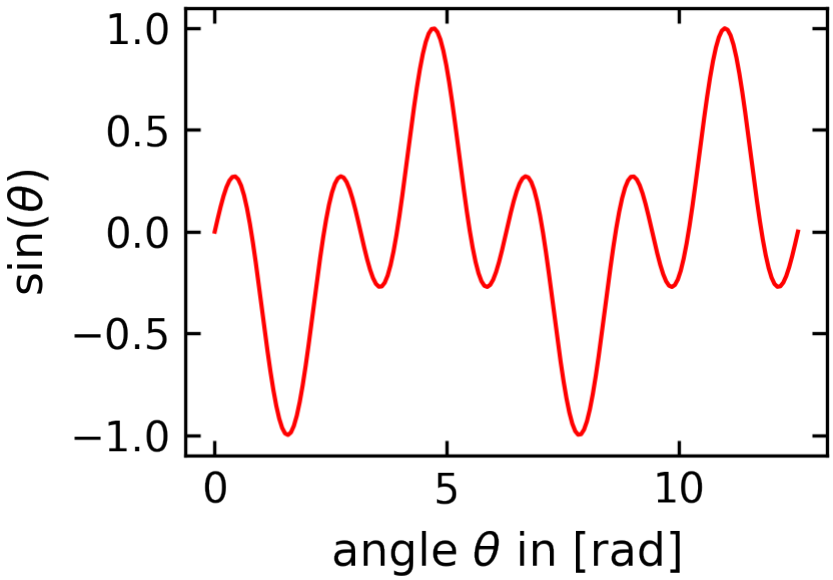
```
import matplotlib as mpl
import matplotlib.font_manager as font_manager
from IPython.core.display import HTML
import matplotlib.pyplot as plt
import numpy as np
from directory_tree import display_tree
```

```
plt.rcParams.update({'font.size': 12,
                     'lines.linewidth': 1,
                     'lines.markersize': 10,
                     'axes.labelsize': 11,
                     'xtick.labelsize' : 10,
                     'ytick.labelsize' : 10,
                     'xtick.top' : True,
                     'xtick.direction' : 'in',
                     'ytick.right' : True,
                     'ytick.direction' : 'in',})

%config InlineBackend.figure_format = 'retina'
```

```
def get_size(w,h):
    return((w/2.54,h/2.54))
```

```
plt.figure(figsize=get_size(7,5),dpi=150)
x=np.linspace(0,np.pi*4,200)
plt.plot(x,np.sin(x)*np.cos(2*x),color='r')
plt.xlabel(r"angle $\theta$ in [rad]")
plt.ylabel(r"$\sin(\theta)$")
plt.savefig("../figure1.pdf",bbox_inches = 'tight')
plt.show()
```


1.0
0.5
0.0
−0.5
−1.0
sin(θ)
0
5
10
angle θ in [rad]