

Numerical Recipes: Hand-In 4

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Abstract

In this report we present the problems, solutions and scripts for the exercises from the fourth handout for the course Numerical Recipes.

Plotting styles in this report are set using the following code

```
1 def set_styles():
2     """For consistent plotting scheme"""
3     plt.style.use('default')
4     mpl.rcParams['axes.grid'] = True
5     plt.style.use('seaborn-darkgrid')
6     mpl.rcParams['font.family'] = 'serif'
7     mpl.rcParams['lines.linewidth'] = 1.5
8     mpl.rcParams['font.size'] = 14
```

Listing 1: Matplotlib Plotting Styles

1 Solar System Orbits

2 Computing Forces with FFT

3 Galaxy Classification