**Physics 410 6-Week Project:**

Group Members:

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Project Topic:

Asteroids

Data Set:

<http://ssd.jpl.nasa.gov/sbdb_query.cgi#x>

Project Goals:

Plotting asteroids in specified magnitude range

Albedo vs Radius/Size Plot

Histogram of Albedos

List of “Top 50” Highest Albedos

Timeline Plot of the day of year each of the “Top 50” objects transits at midnight

Other Areas to Consider:

We may also look into clustering and plotting asteroids in a given radius of an RA/DEC location in space.

Tools:

Google Code Playground

D3js-Github

Python/Matlab

**What we are actually going to do:**

Bootstrap Interface

1. Project Abstract
2. Plots
   1. 2-variable scatter plot
      1. Id, Albedo versus diameter
      2. Id, Albedo versus magnitude
   2. 3-variable bubble plot
      1. Id, Albedo versus diameter versus distance
   3. 4-variable histogram
      1. Id, mag, diameter, albedo, distance
   4. Timeline
      1. When Top “20” asteroids ‘peak’
   5. 3-variable top 20 plot
      1. Id, peak day, albedo, magnitude
3. What we learned
   1. What tools we used
      1. Matlab
      2. Html – bootstrap
      3. Highcharts
      4. Google playground
      5. Excel
      6. JPL ephemeris module
   2. Code
   3. Data