Node coloring

By default, the nodes in the Mapper output are colored by the average filter value: for all points in a node, the average filter value is computed, and then a color map is applied to all nodes. Currently, the color map is Matplotlib's default "jet" color map, with a range from the lowest to the highest filter value of all points. Low filter values are represented by blue, high filter values by red.

The 'jet' color map

Can also specify color by filter function via

\[
\text{point\_color} = f
\]

point\_color = data[:,0]

point\_color = (data[:,0]**2 + data[:,1]**2)**0.5

name = 'length';
point\_color = (data[:,0]**2 + data[:,1]**2)**0.5
Alternatively, can specify node color

```
node_color = [1, 2, 3, 4, 5, 6, 7, 8]
```

In Jupyter notebook

Choose how to color vertices in TDA mapper graph

```
node_color
```

Output the color code for each node in TDA mapper graph

```
array([1, 2, 3, 4, 5, 6, 7, 8])
```