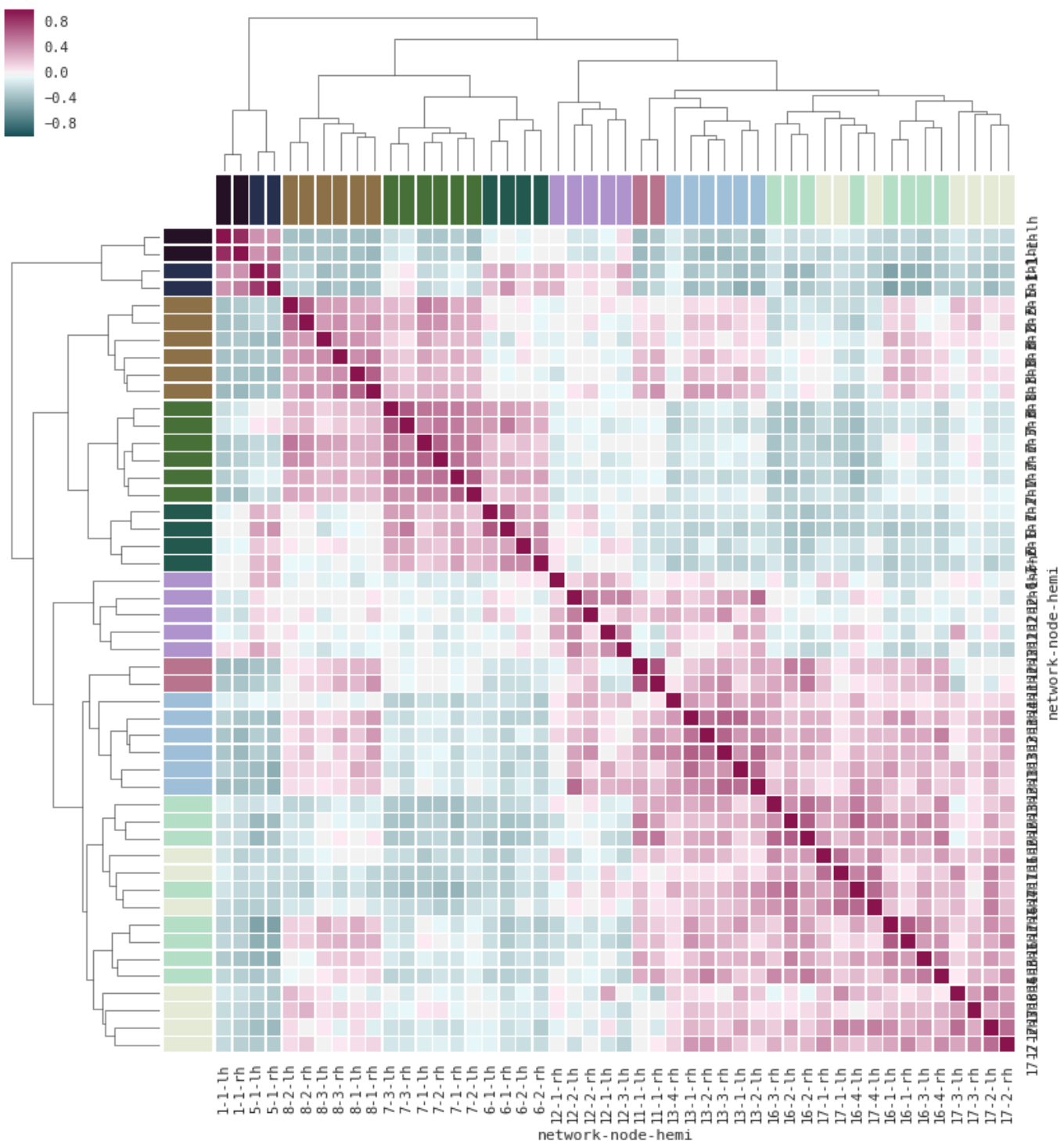


# Discovering structure in heatmap data



Python source code: [download source: structured\_heatmap.py]  
 (../downloads/structured\_heatmap.py)

```
import pandas as pd
import seaborn as sns
sns.set(font="monospace")

# Load the brain networks example dataset
df = sns.load_dataset("brain_networks", header=[0, 1, 2], index_col=0)

# Select a subset of the networks
used_networks = [1, 5, 6, 7, 8, 11, 12, 13, 16, 17]
used_columns = (df.columns.get_level_values("network")
                .astype(int)
                .isin(used_networks))
df = df.loc[:, used_columns]

# Create a custom palette to identify the networks
network_pal = sns.cubehelix_palette(len(used_networks),
                                    light=.9, dark=.1, reverse=True,
                                    start=1, rot=-2)
network_lut = dict(zip(map(str, used_networks), network_pal))

# Convert the palette to vectors that will be drawn on the side of the matrix
networks = df.columns.get_level_values("network")
network_colors = pd.Series(networks).map(network_lut)

# Create a custom colormap for the heatmap values
cmap = sns.diverging_palette(h_neg=210, h_pos=350, s=90, l=30, as_cmap=True)

# Draw the full plot
sns.clustermap(df.corr(), row_colors=network_colors, linewidths=.5,
               col_colors=network_colors, figsize=(13, 13), cmap=cmap)
```

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Source ([./\\_sources/examples/structured\\_heatmap.txt](#))

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