

Scatter plot showing the relationship between the number of nodes (x-axis, 0.0 to 20.0) and the number of edges (y-axis, 0.0 to 1.0) for various datasets. Three lines represent different values of  $p$ :  $p=0.1$  (orange),  $p=0.5$  (green), and  $p=0.9$  (black). The datasets are labeled with their names and the corresponding  $p$  value. The plot shows that as the number of nodes increases, the number of edges also increases, with the rate of increase being higher for  $p=0.9$  than for  $p=0.1$  and  $p=0.5$ .

