

PR3b: Centrality insights

- Compute the Katz centrality for your network by setting alpha between and excluding 0.0 and $1/\lambda_1$. As for beta, set it first to 0.2, then to 0.5, and then to 1. Are there any differences in rankings between the three cases?
- Compute the PageRank for all nodes of your network
 - Which are the 10 nodes with the highest PageRank?
 - What are the 10 nodes with the largest number of connections? Do they correspond to the 10 nodes with the highest PageRank? Why?
- Compare the scores of Katz centrality (choose alpha and beta yourself) with the ones of PageRank by creating a scatterplot of all nodes.
 - The scatterplot should contain one point for each node with the PageRank on the x-axis and the Katz centrality on the y-axis. Do you need to use logarithmic axes? Analyse and interpret the observed shape of the scatterplot.