

Figure 1: The relationship between the number of nodes and the number of edges for the different models. The x-axis represents the number of nodes (ranging from 0.3 to 1.15), and the y-axis represents the number of edges (ranging from 0 to 1.0). The legend identifies the following models:

- JI (Black solid line)
- log JI (Red solid line)
- BPLN (Green solid line)
- log BPLN (Blue dashed line)
- Xtalk (Cyan solid line)
- log Xtalk (Magenta solid line)
- Xtalk.Unique (Yellow dashed line)
- Xtalk.Unique.log (Grey dotted line)

The graph shows that the number of edges generally increases with the number of nodes, with the JI model maintaining a constant edge count of 1.0. The log JI model shows a decreasing trend in the number of edges as the number of nodes increases. The BPLN model shows a sharp increase in the number of edges as the number of nodes increases, reaching 1.0 at approximately 0.8 nodes. The Xtalk and Xtalk.Unique models show a sharp increase in the number of edges as the number of nodes increases, reaching 1.0 at approximately 0.8 nodes. The log Xtalk and Xtalk.Unique.log models show a sharp increase in the number of edges as the number of nodes increases, reaching 1.0 at approximately 0.8 nodes.



0.3

0.85

1.15

Number of citations