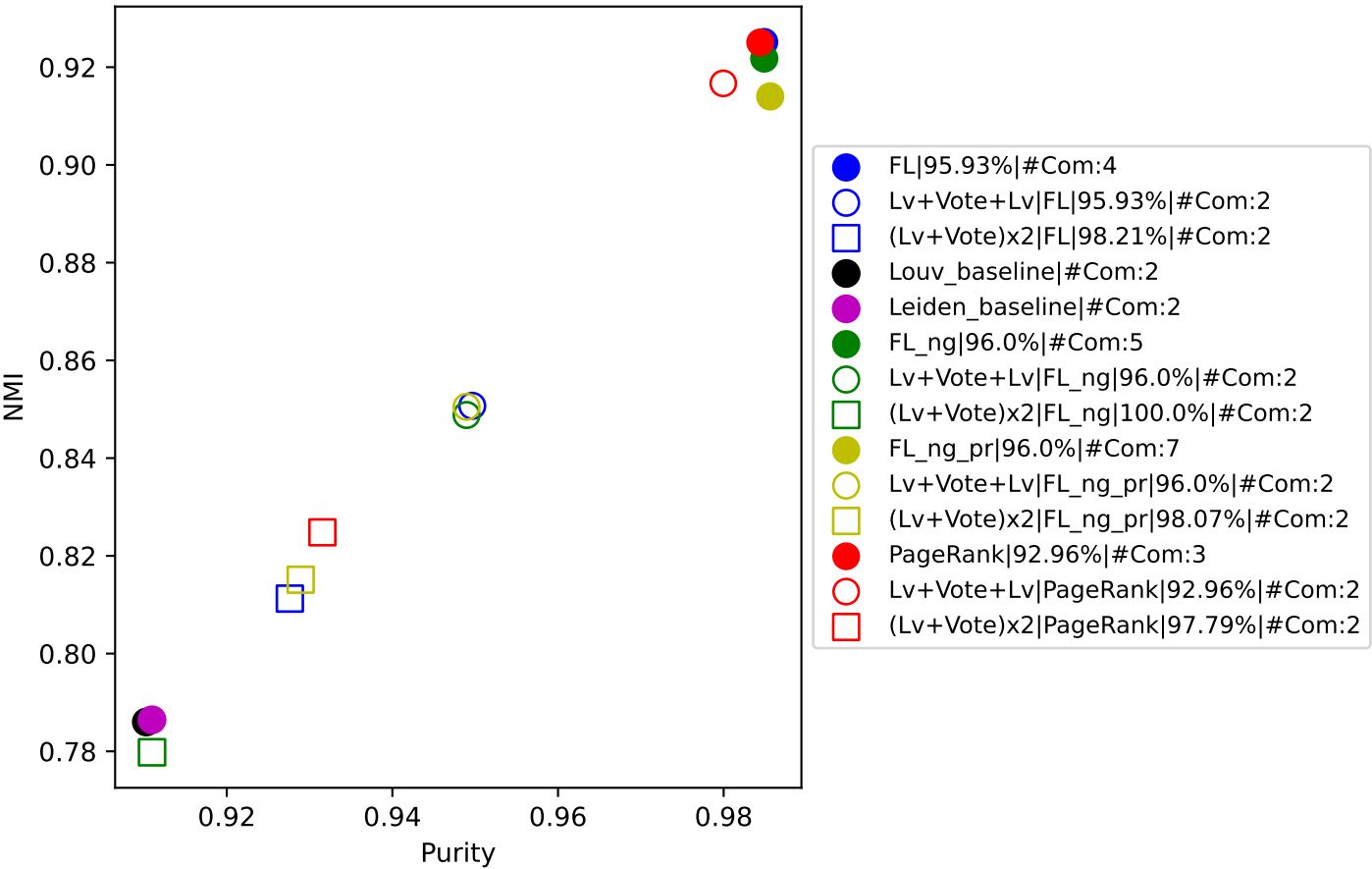
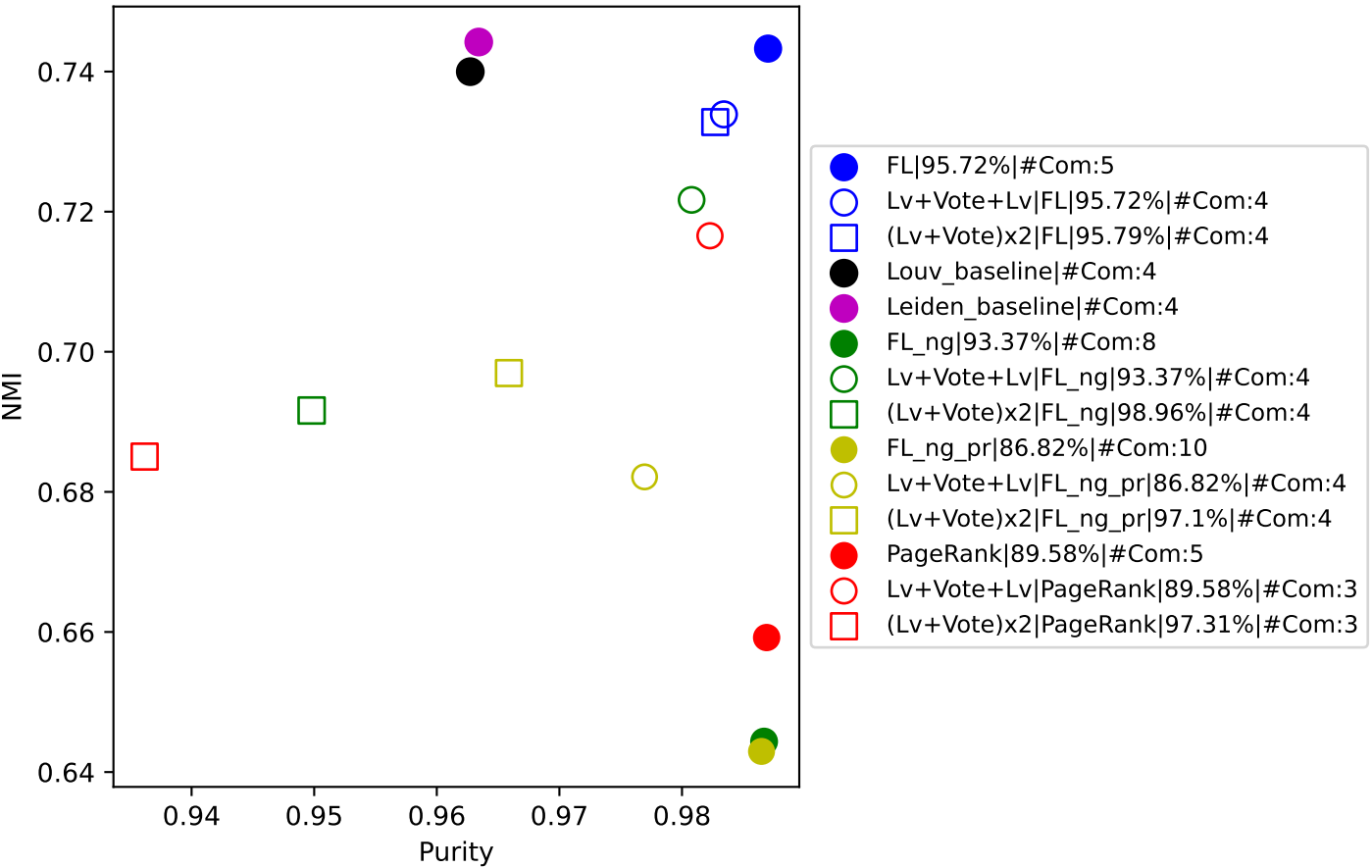


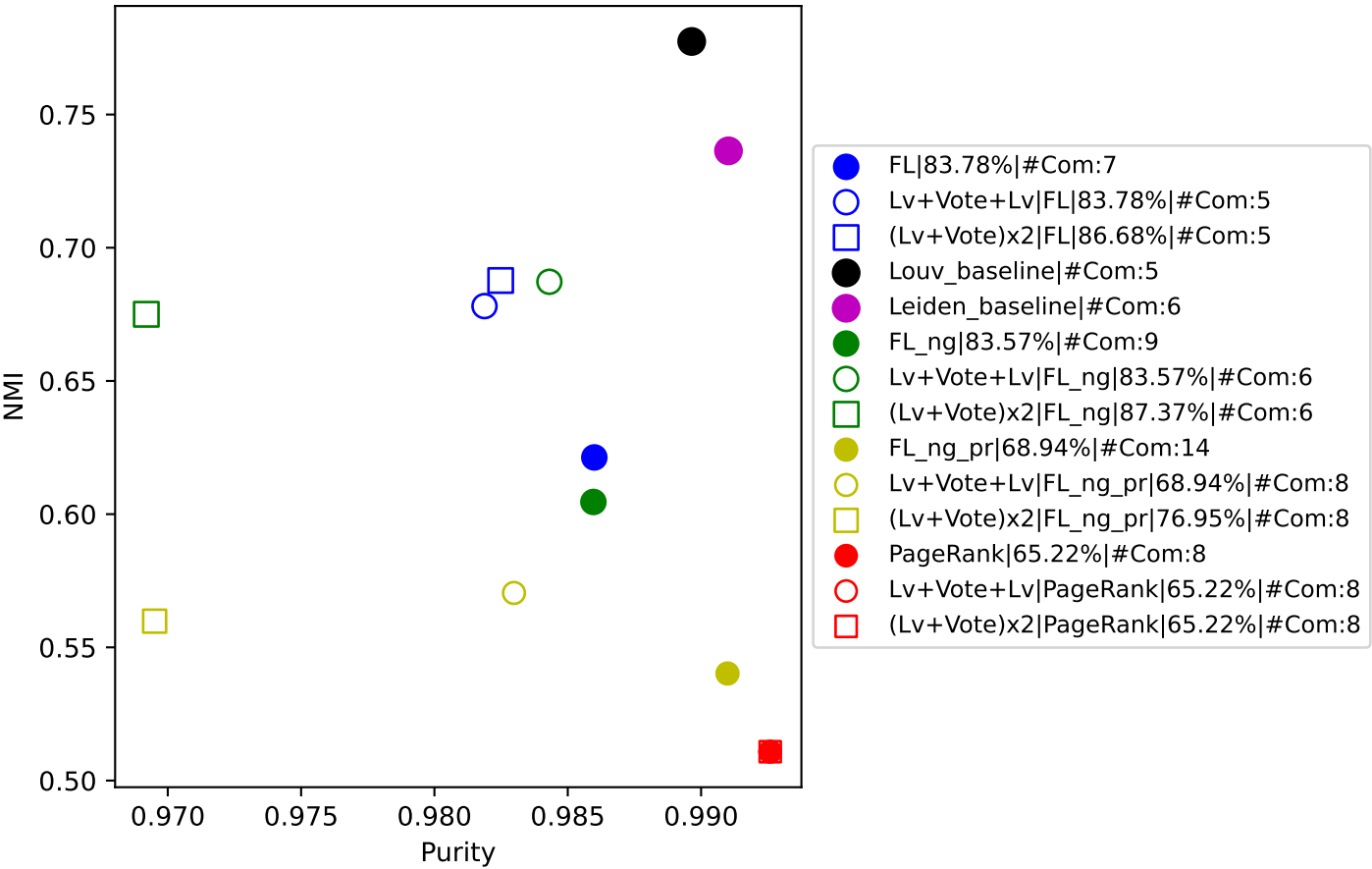
Xin | top 20.0%| Num_hops: log(n)|res: 0.05|#OfComm: 4



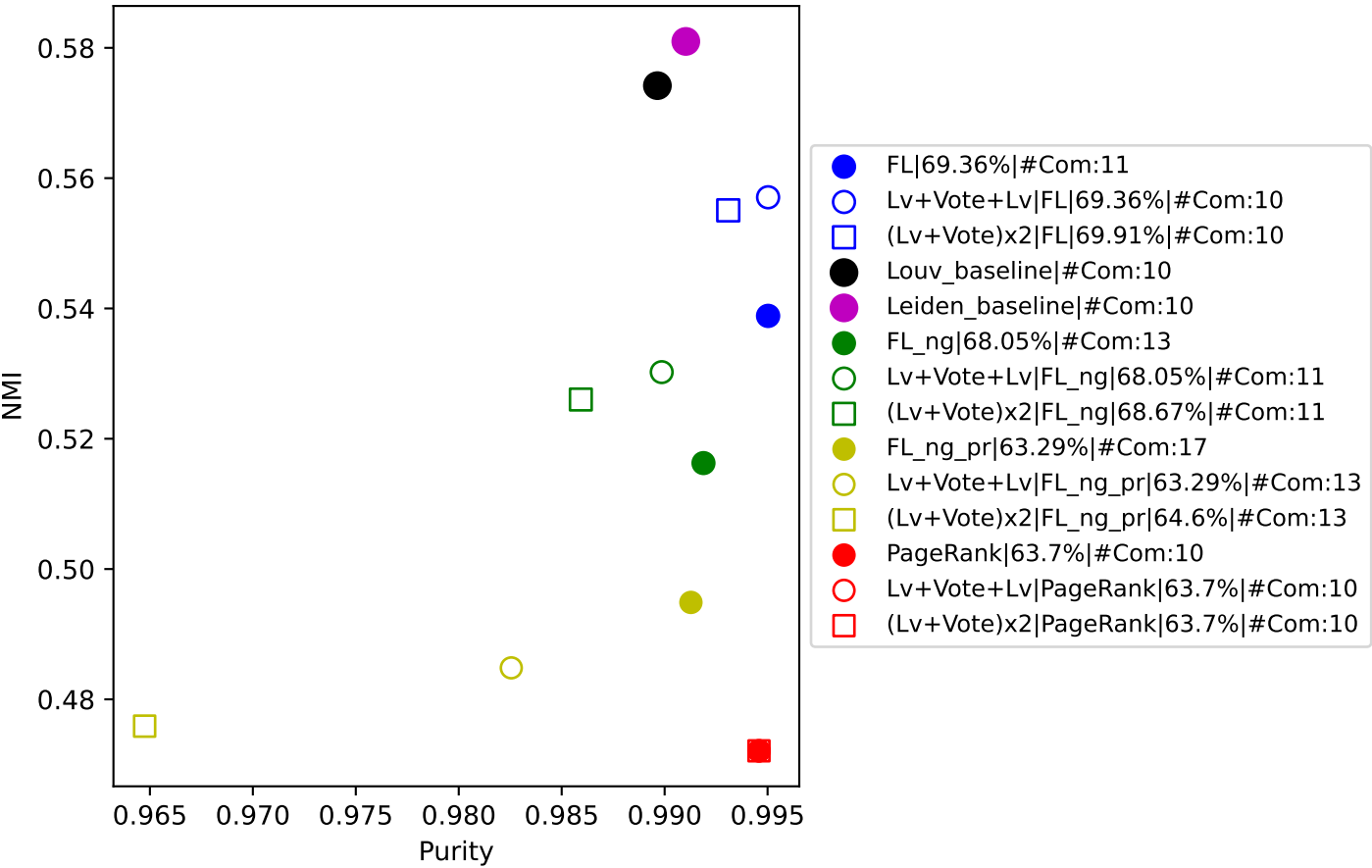
Xin | top 20.0%| Num_hops: log(n)|res: 0.25|#OfComm: 4



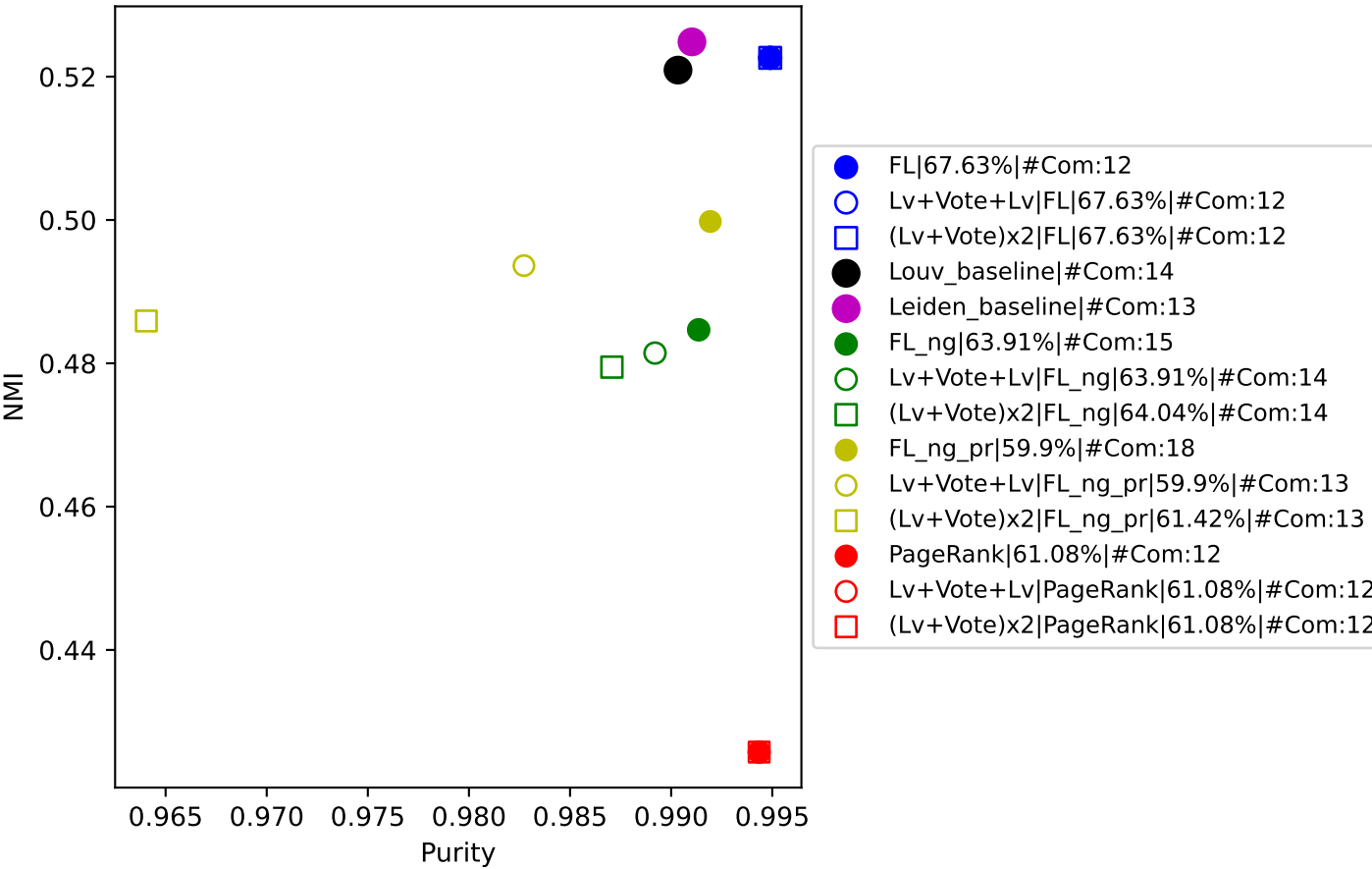
Xin | top 20.0%| Num_hops: log(n)|res: 0.5|#OfComm: 4



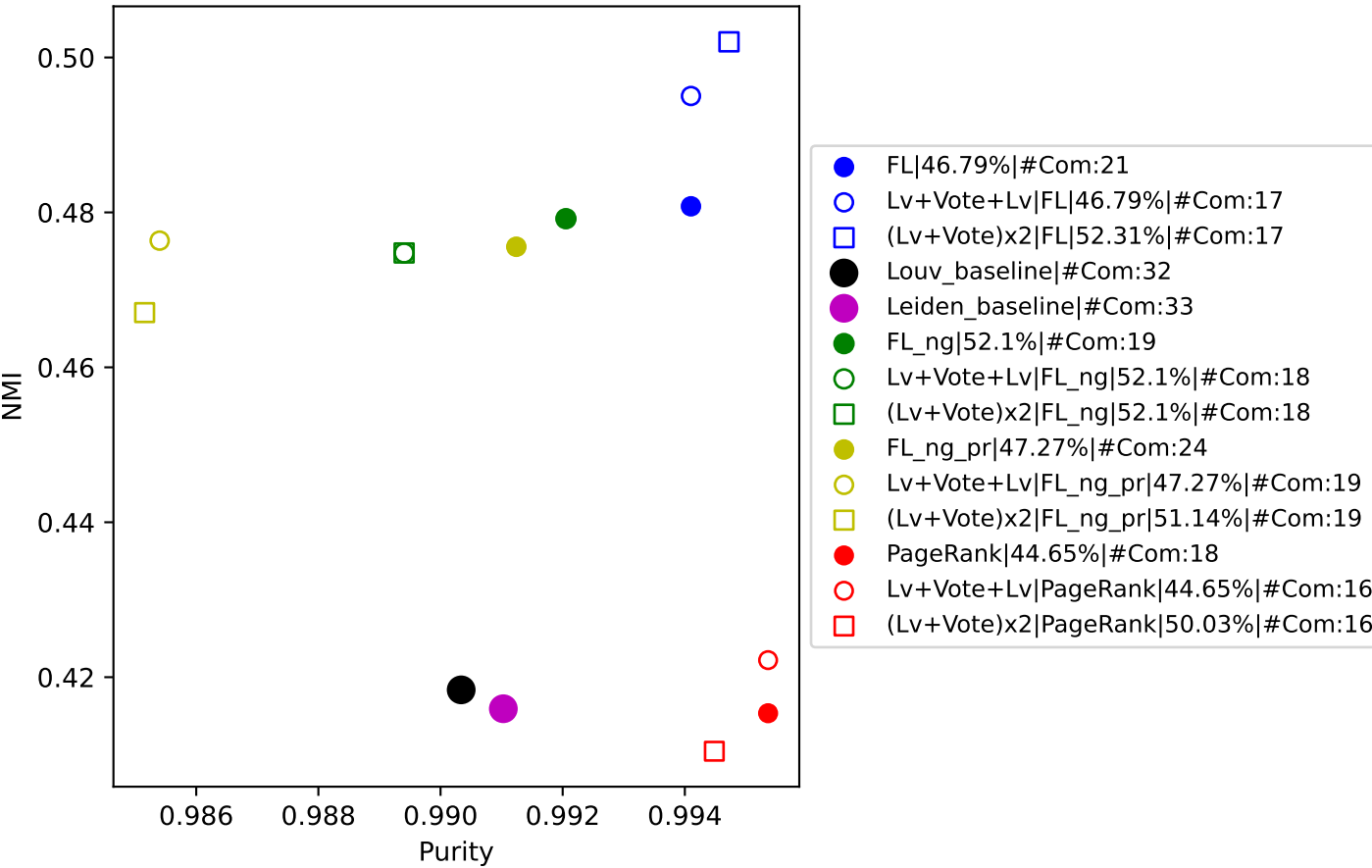
Xin | top 20.0%| Num_hops: log(n)|res: 1|#OfComm: 4



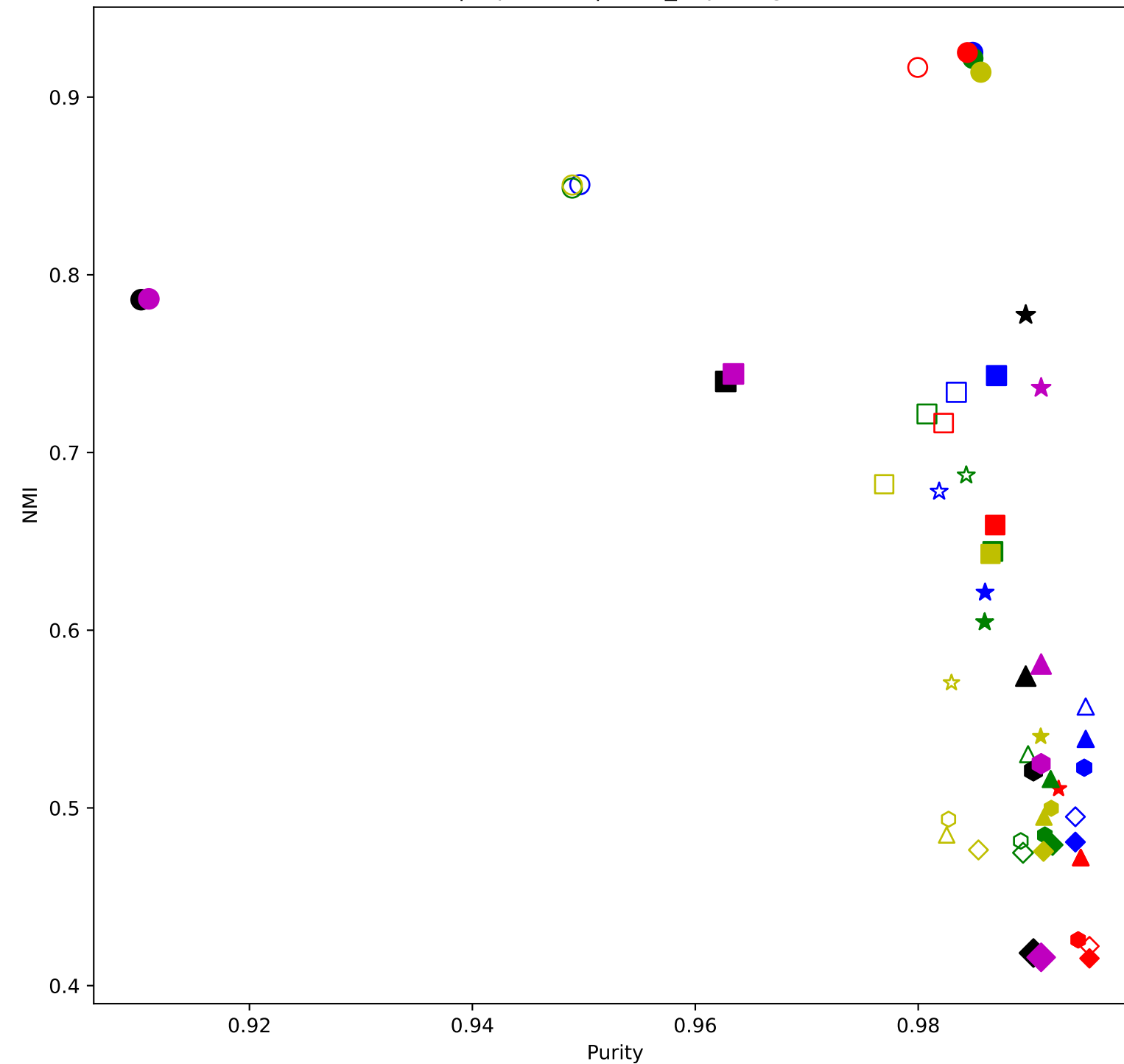
Xin | top 20.0%| Num_hops: log(n)|res: 1.5|#OfComm: 4



Xin | top 20.0%| Num_hops: log(n)|res: 5|#OfComm: 4

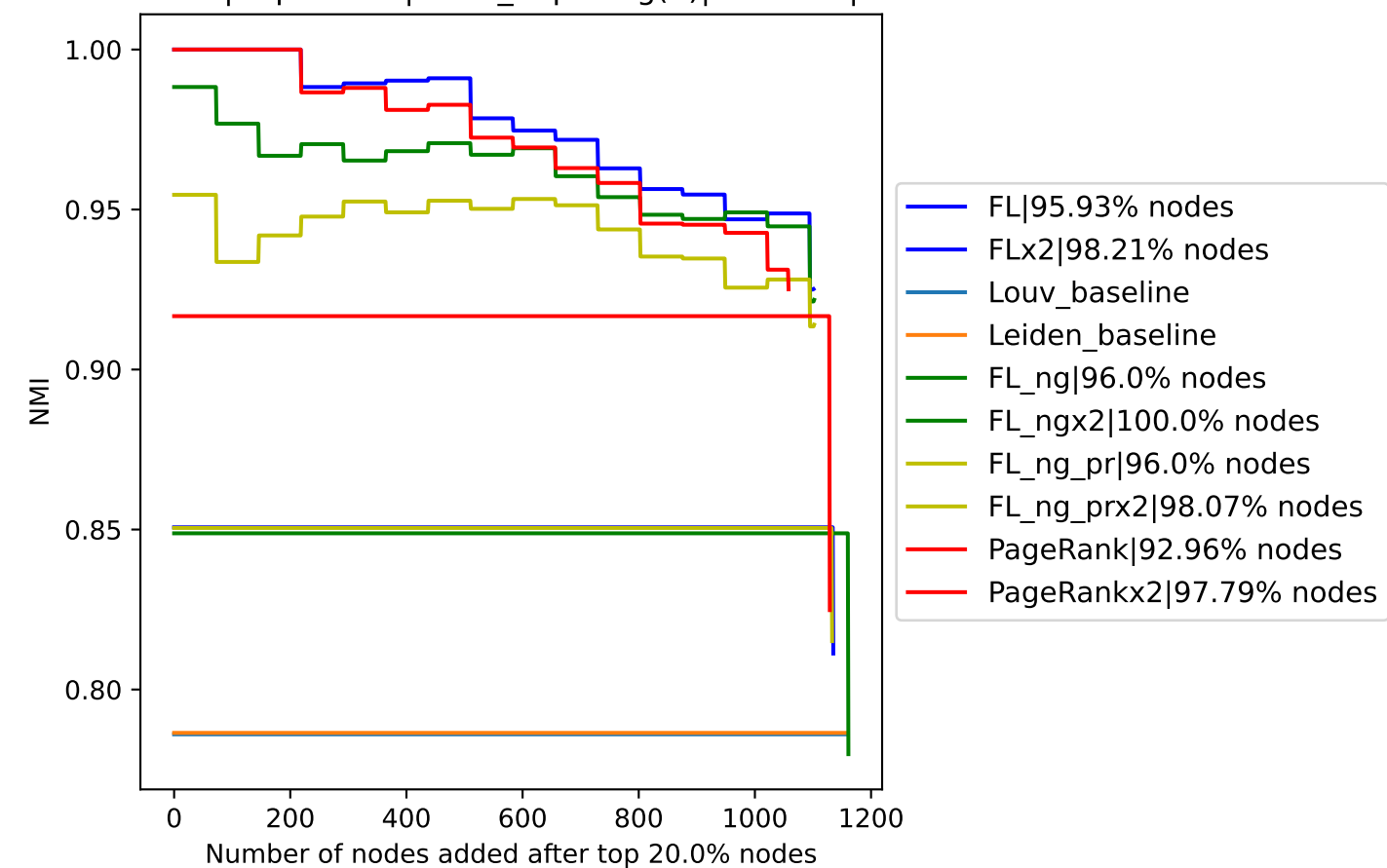


Xin | top 20.0%| Num_hops: log(n)

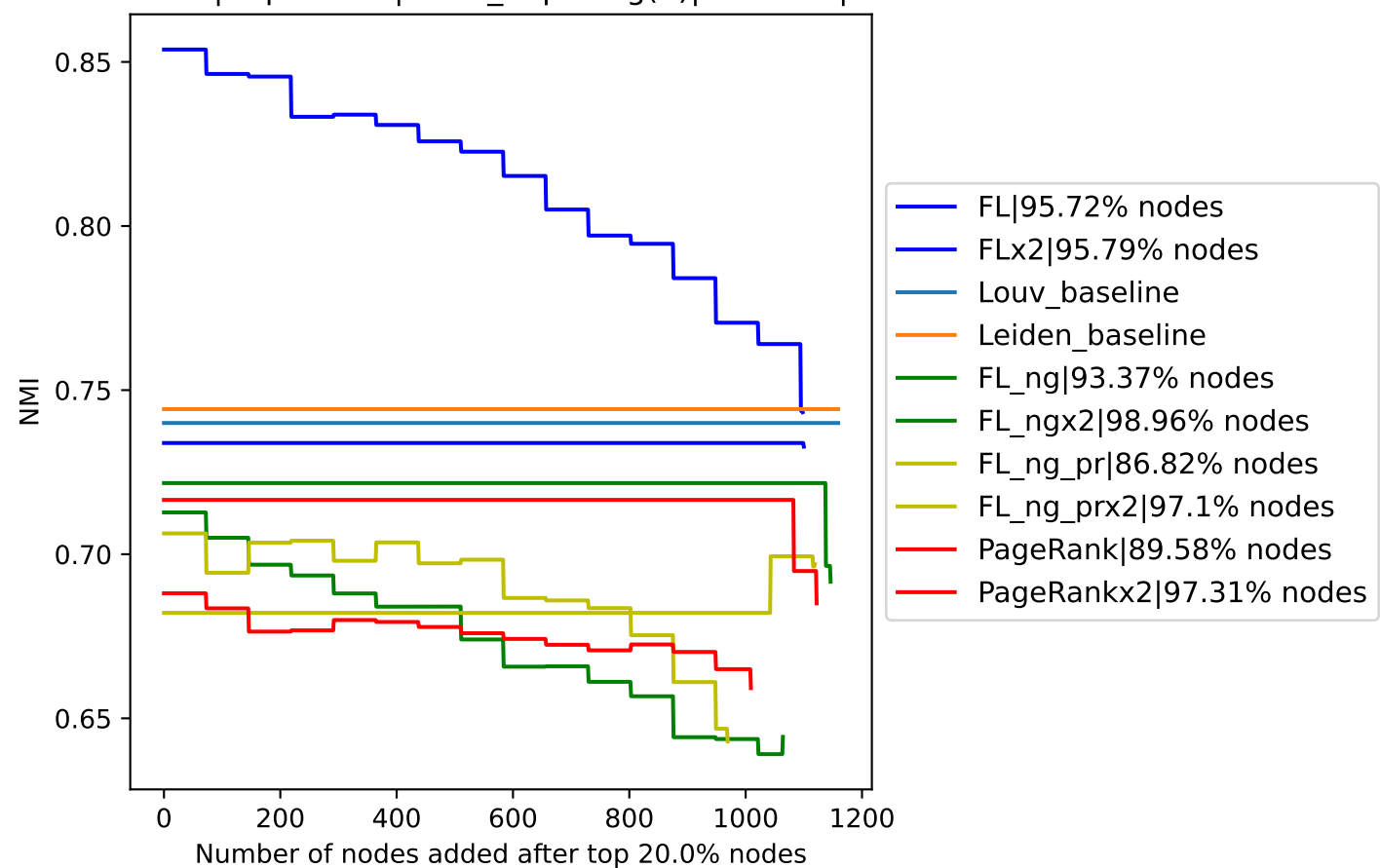


- | | |
|-----------------------------------|----------------------------------|
| ● FL 0.05 95.93% | ▲ FL 1 69.36% |
| ○ Lv+Vote+Lv FL 0.05 95.93% | △ Lv+Vote+Lv FL 1 69.36% |
| ● Louv_baseline 0.05 | ▲ Louv_baseline 1 |
| ● Leiden_baseline 0.05 | ▲ Leiden_baseline 1 |
| ● FL_ng 0.05 96.0% | ▲ FL_ng 1 68.05% |
| ○ Lv+Vote+Lv FL_ng 0.05 96.0% | △ Lv+Vote+Lv FL_ng 1 68.05% |
| ● FL_ng_pr 0.05 96.0% | ▲ FL_ng_pr 1 63.29% |
| ○ Lv+Vote+Lv FL_ng_pr 0.05 96.0% | △ Lv+Vote+Lv FL_ng_pr 1 63.29% |
| ● PageRank 0.05 92.96% | ▲ PageRank 1 63.7% |
| ○ Lv+Vote+Lv PageRank 0.05 92.96% | △ Lv+Vote+Lv PageRank 1 63.7% |
| ■ FL 0.25 95.72% | ● FL 1.5 67.63% |
| □ Lv+Vote+Lv FL 0.25 95.72% | ○ Lv+Vote+Lv FL 1.5 67.63% |
| ■ Louv_baseline 0.25 | ● Louv_baseline 1.5 |
| ■ Leiden_baseline 0.25 | ● Leiden_baseline 1.5 |
| ■ FL_ng 0.25 93.37% | ● FL_ng 1.5 63.91% |
| □ Lv+Vote+Lv FL_ng 0.25 93.37% | ○ Lv+Vote+Lv FL_ng 1.5 63.91% |
| ■ FL_ng_pr 0.25 86.82% | ● FL_ng_pr 1.5 59.9% |
| □ Lv+Vote+Lv FL_ng_pr 0.25 86.82% | ○ Lv+Vote+Lv FL_ng_pr 1.5 59.9% |
| ■ PageRank 0.25 89.58% | ● PageRank 1.5 61.08% |
| □ Lv+Vote+Lv PageRank 0.25 89.58% | ○ Lv+Vote+Lv PageRank 1.5 61.08% |
| ★ FL 0.5 83.78% | ◆ FL 5 46.79% |
| ☆ Lv+Vote+Lv FL 0.5 83.78% | ◇ Lv+Vote+Lv FL 5 46.79% |
| ★ Louv_baseline 0.5 | ◆ Louv_baseline 5 |
| ☆ Leiden_baseline 0.5 | ◆ Leiden_baseline 5 |
| ★ FL_ng 0.5 83.57% | ◆ FL_ng 5 52.1% |
| ☆ Lv+Vote+Lv FL_ng 0.5 83.57% | ◇ Lv+Vote+Lv FL_ng 5 52.1% |
| ★ FL_ng_pr 0.5 68.94% | ◆ FL_ng_pr 5 47.27% |
| ☆ Lv+Vote+Lv FL_ng_pr 0.5 68.94% | ◇ Lv+Vote+Lv FL_ng_pr 5 47.27% |
| ★ PageRank 0.5 65.22% | ◆ PageRank 5 44.65% |
| ☆ Lv+Vote+Lv PageRank 0.5 65.22% | ◇ Lv+Vote+Lv PageRank 5 44.65% |

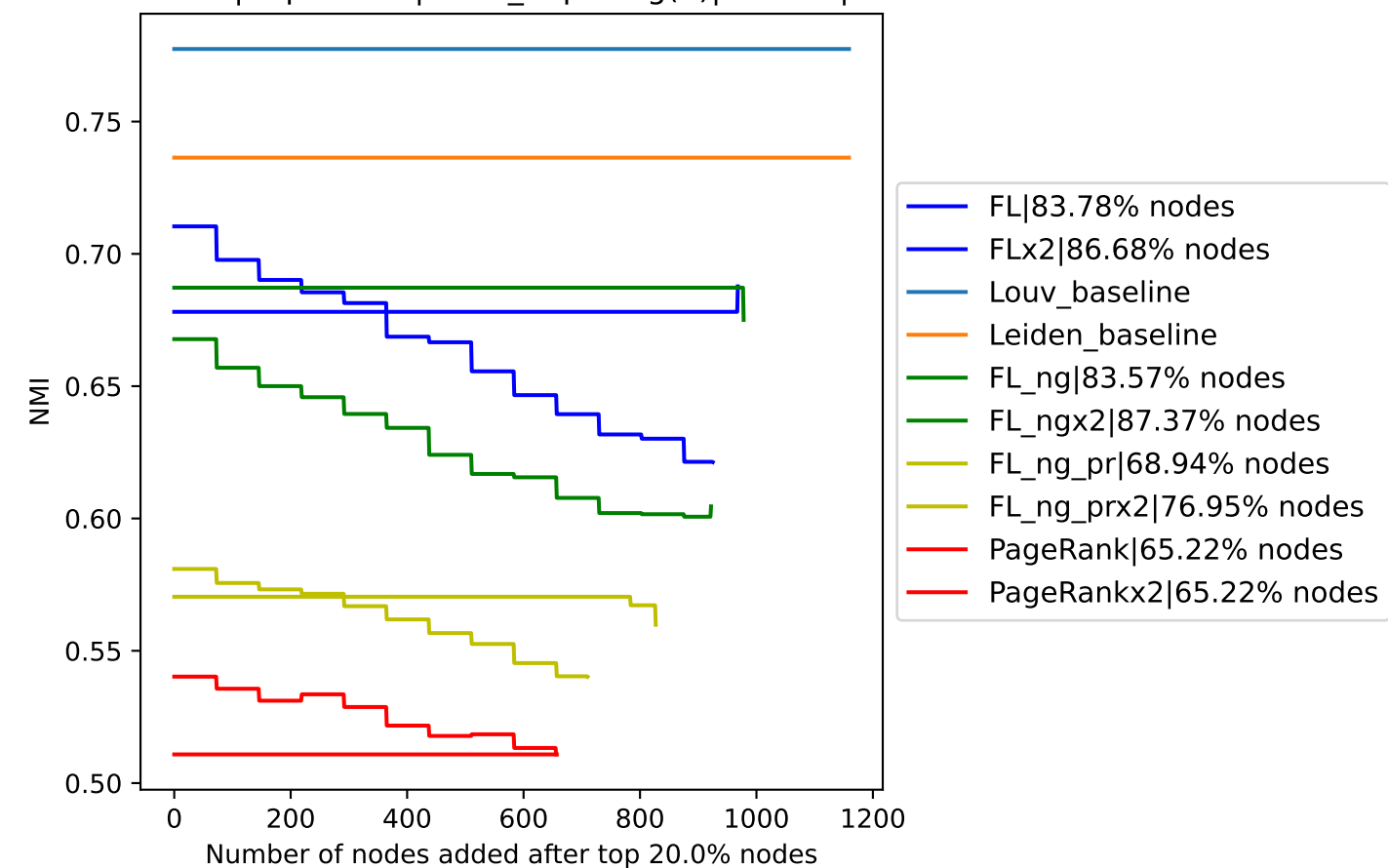
Xin | top 20.0%| Num_hops: log(n)|res: 0.05|



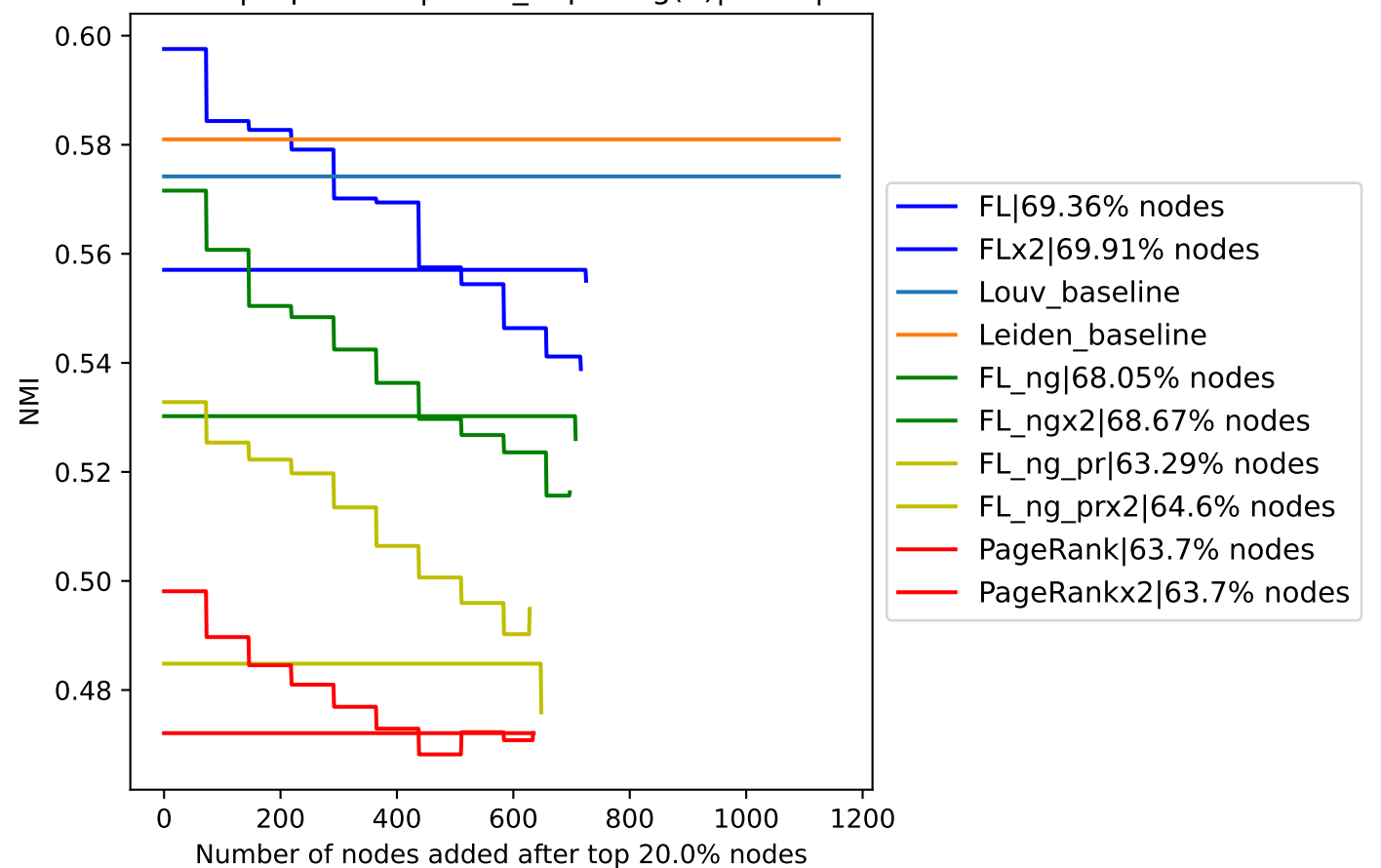
Xin | top 20.0%| Num_hops: log(n)|res: 0.25|



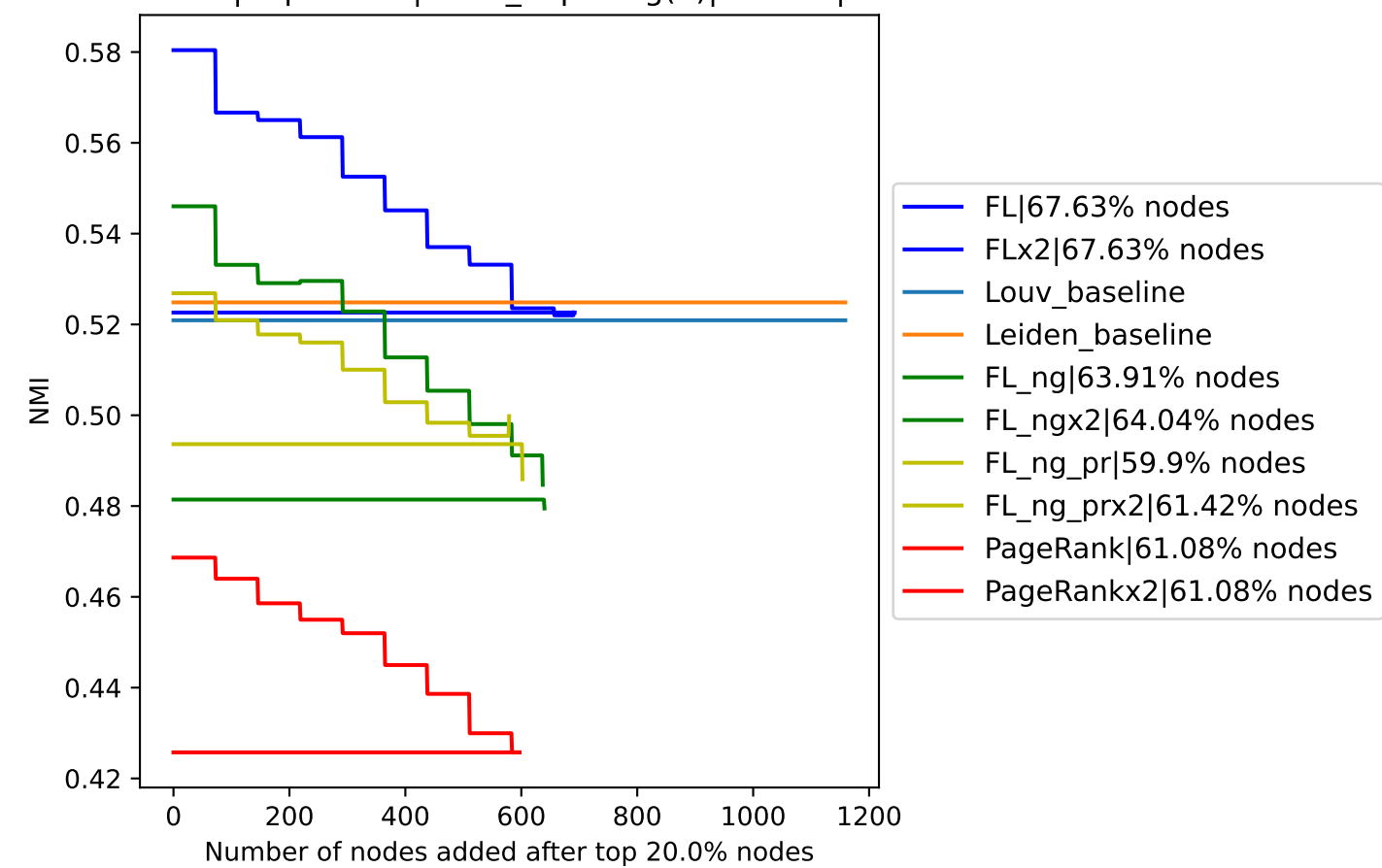
Xin | top 20.0%| Num_hops: log(n)|res: 0.5|



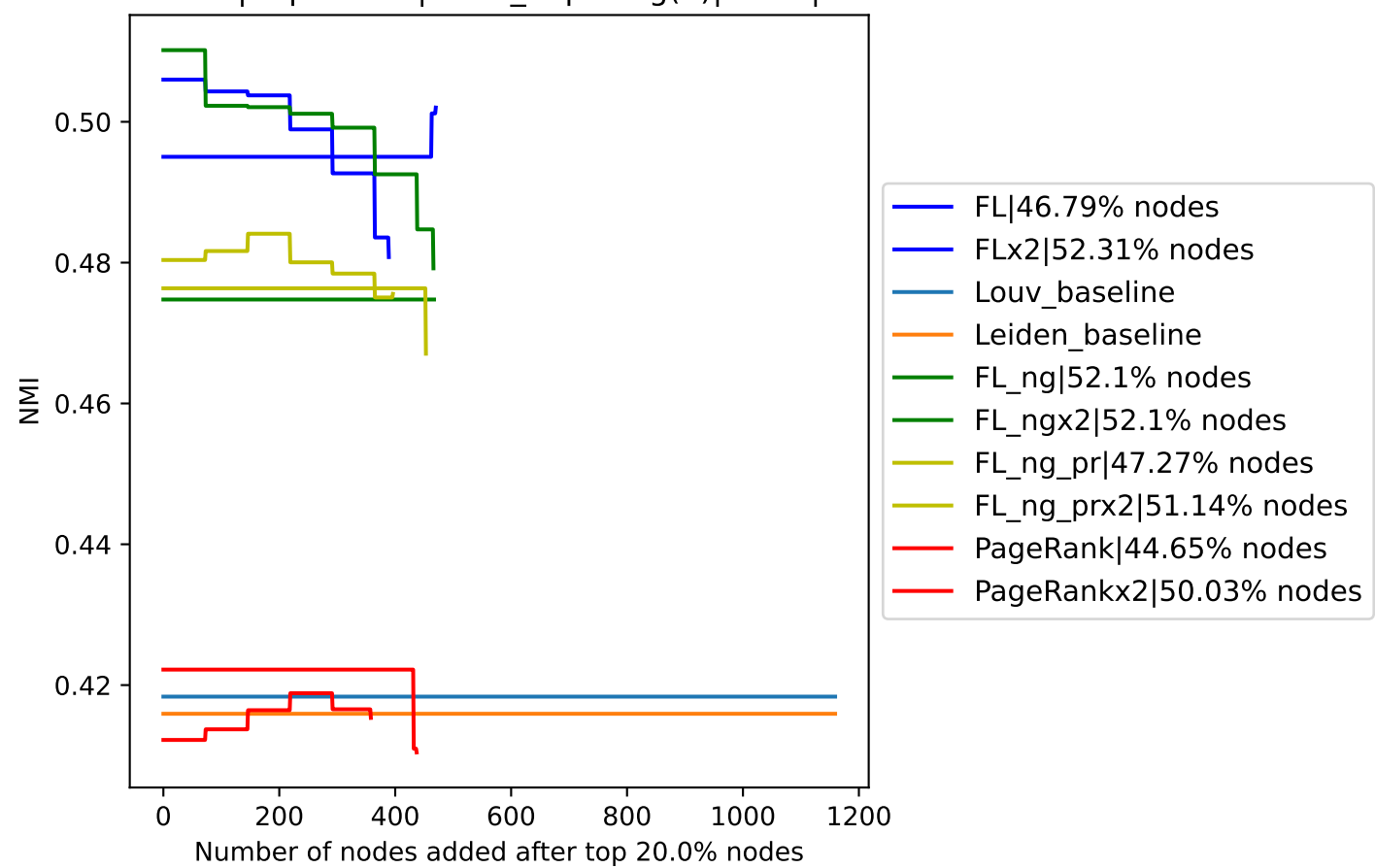
Xin | top 20.0%| Num_hops: log(n)|res: 1|



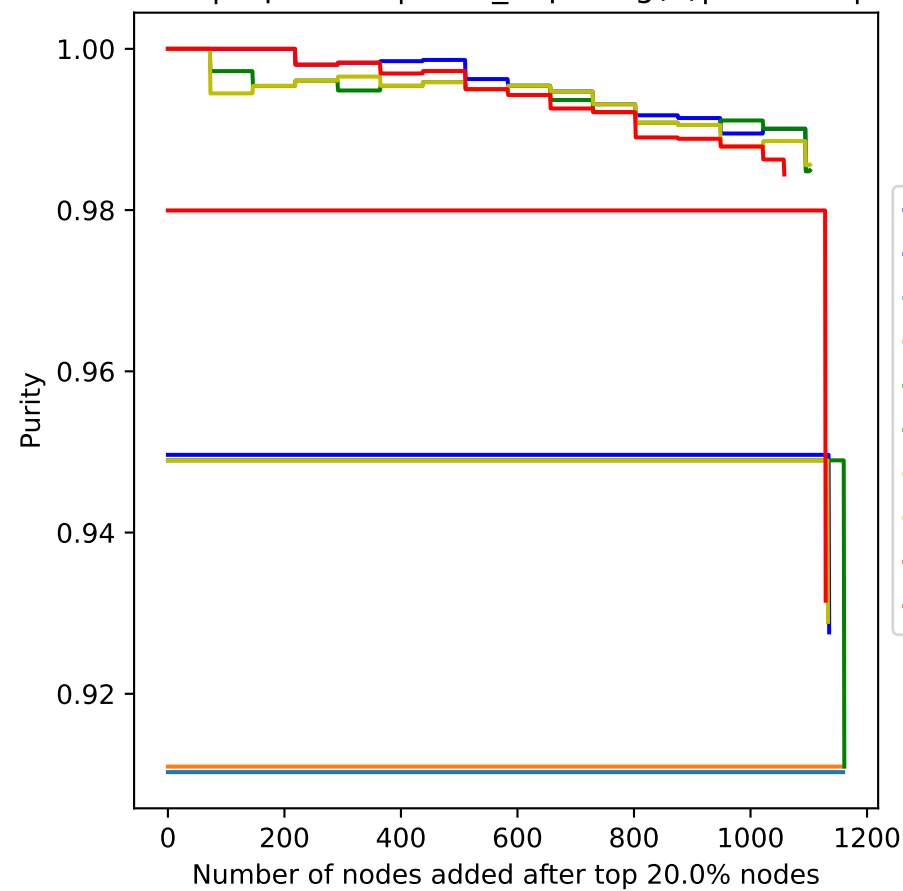
Xin | top 20.0%| Num_hops: log(n)|res: 1.5|



Xin | top 20.0%| Num_hops: log(n)|res: 5|

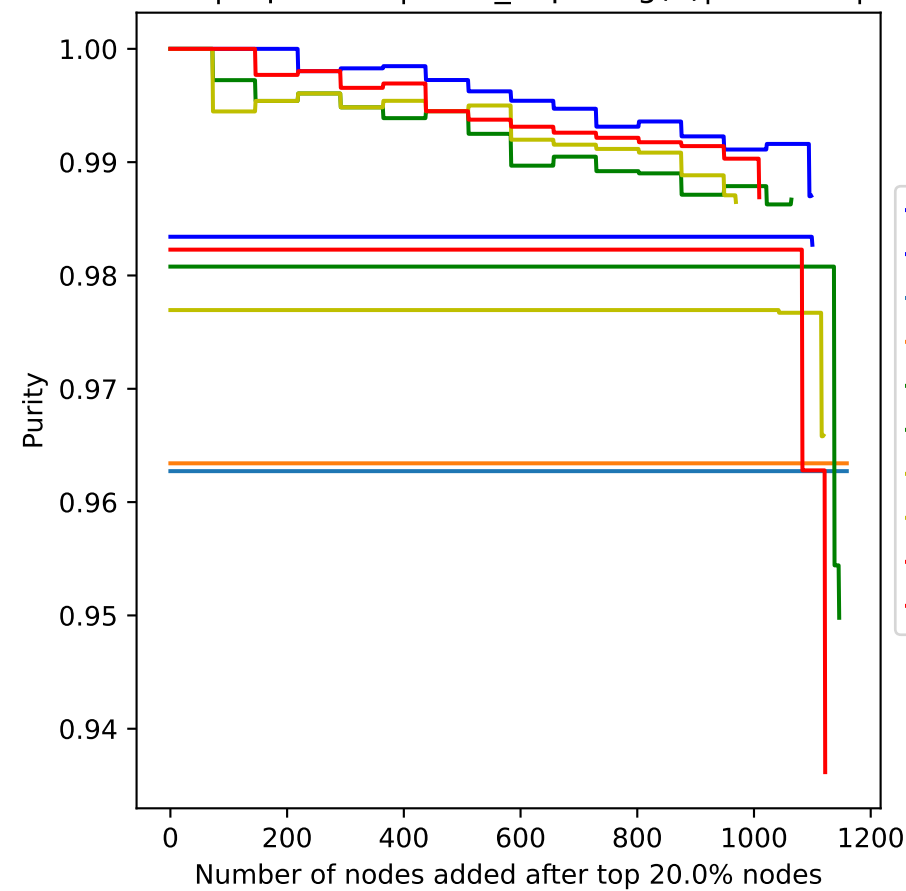


Xin | top 20.0%| Num_hops: log(n)|res: 0.05|



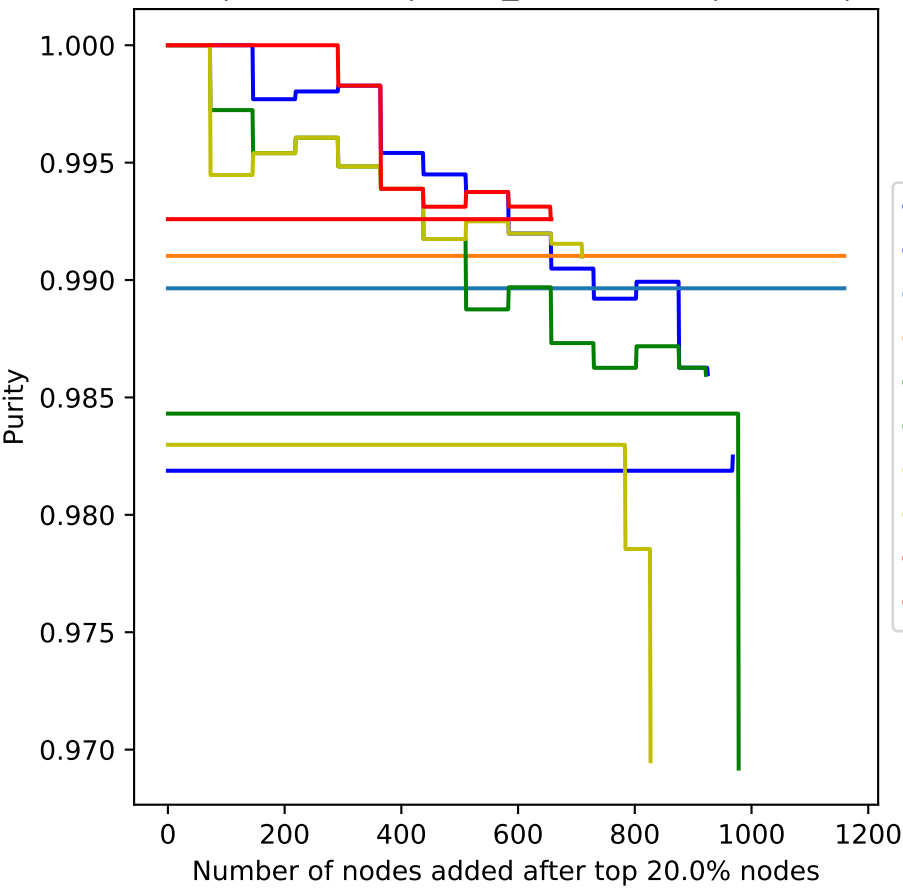
FL|95.93% nodes
 FLx2|98.21% nodes
 Louv_baseline
 Leiden_baseline
 FL_ng|96.0% nodes
 FL_ngx2|100.0% nodes
 FL_ng_pr|96.0% nodes
 FL_ng_prx2|98.07% nodes
 PageRank|92.96% nodes
 PageRankx2|97.79% nodes

Xin | top 20.0%| Num_hops: log(n)|res: 0.25|



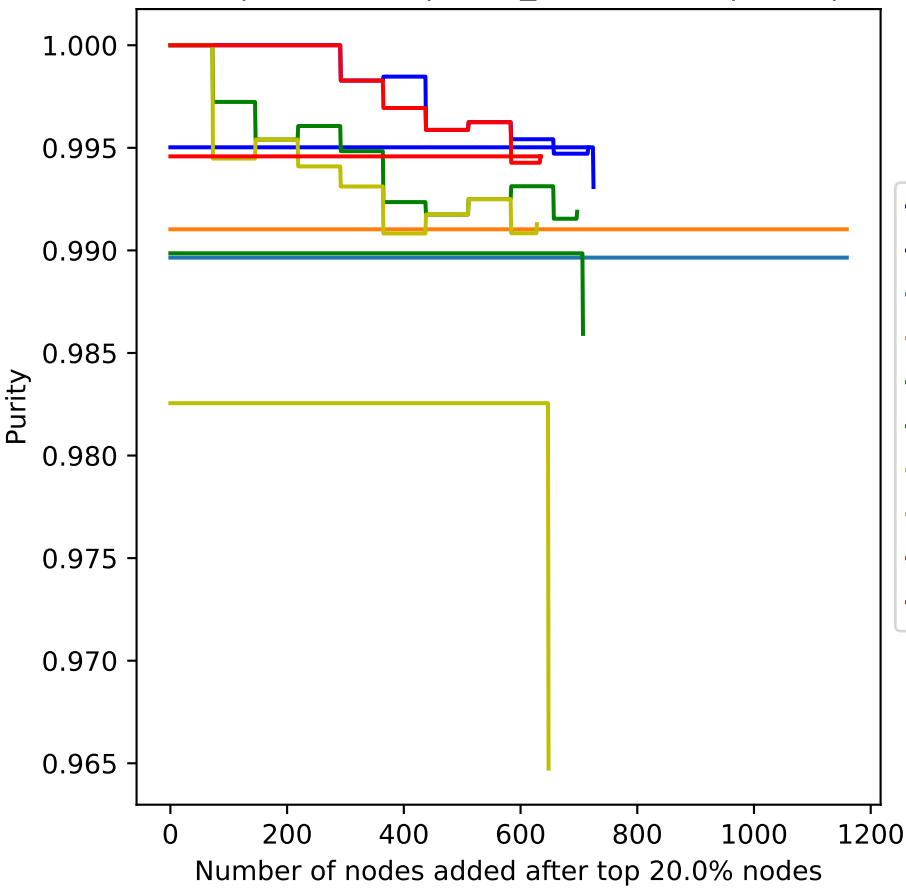
FL|95.72% nodes
 FLx2|95.79% nodes
 Louv_baseline
 Leiden_baseline
 FL_ng|93.37% nodes
 FL_ngx2|98.96% nodes
 FL_ng_pr|86.82% nodes
 FL_ng_prx2|97.1% nodes
 PageRank|89.58% nodes
 PageRankx2|97.31% nodes

Xin | top 20.0%| Num_hops: log(n)|res: 0.5|



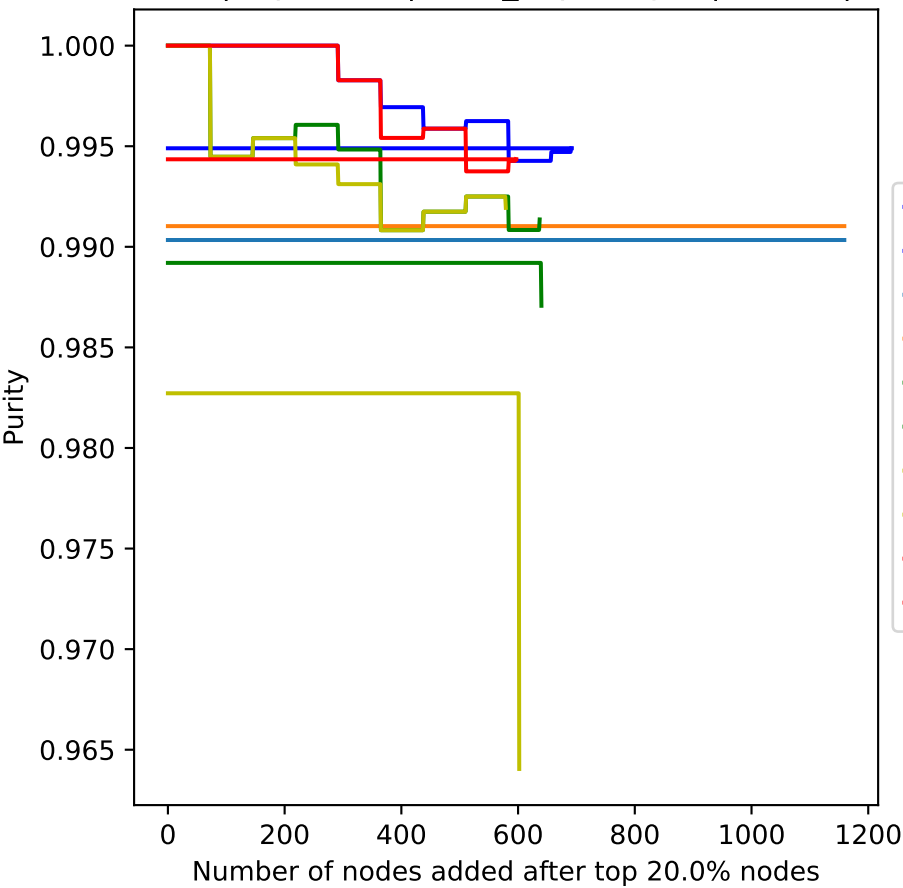
FL|83.78% nodes
 FLx2|86.68% nodes
 Louv_baseline
 Leiden_baseline
 FL_ng|83.57% nodes
 FL_ngx2|87.37% nodes
 FL_ng_pr|68.94% nodes
 FL_ng_prx2|76.95% nodes
 PageRank|65.22% nodes
 PageRankx2|65.22% nodes

Xin | top 20.0%| Num_hops: log(n)|res: 1|



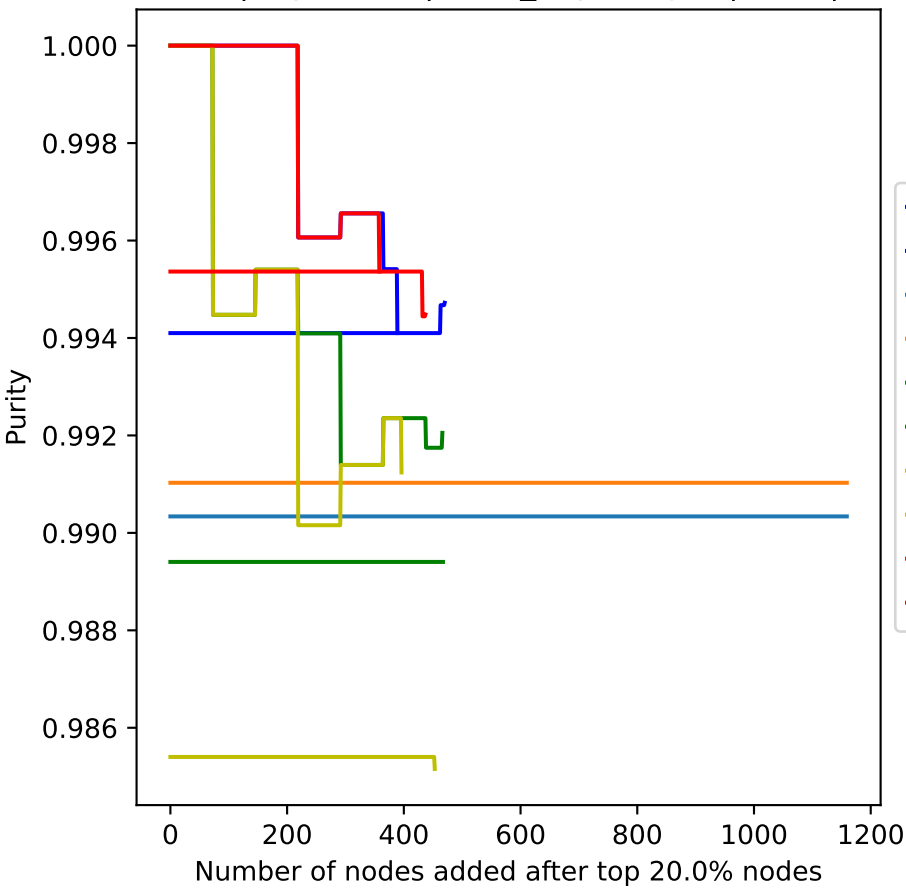
FL|69.36% nodes
 FLx2|69.91% nodes
 Louv_baseline
 Leiden_baseline
 FL_ng|68.05% nodes
 FL_ngx2|68.67% nodes
 FL_ng_pr|63.29% nodes
 FL_ng_prx2|64.6% nodes
 PageRank|63.7% nodes
 PageRankx2|63.7% nodes

Xin | top 20.0%| Num_hops: log(n)|res: 1.5|

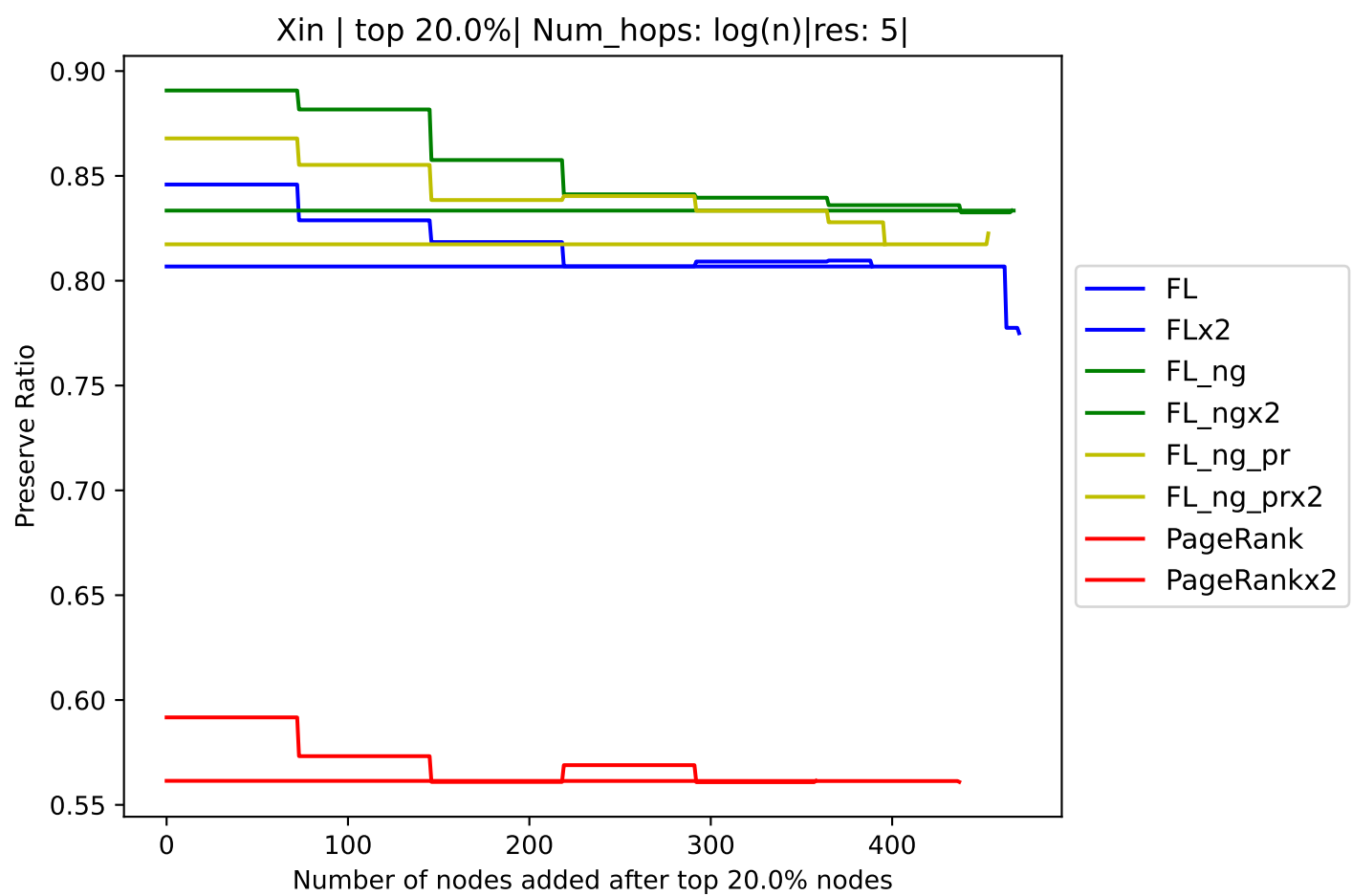
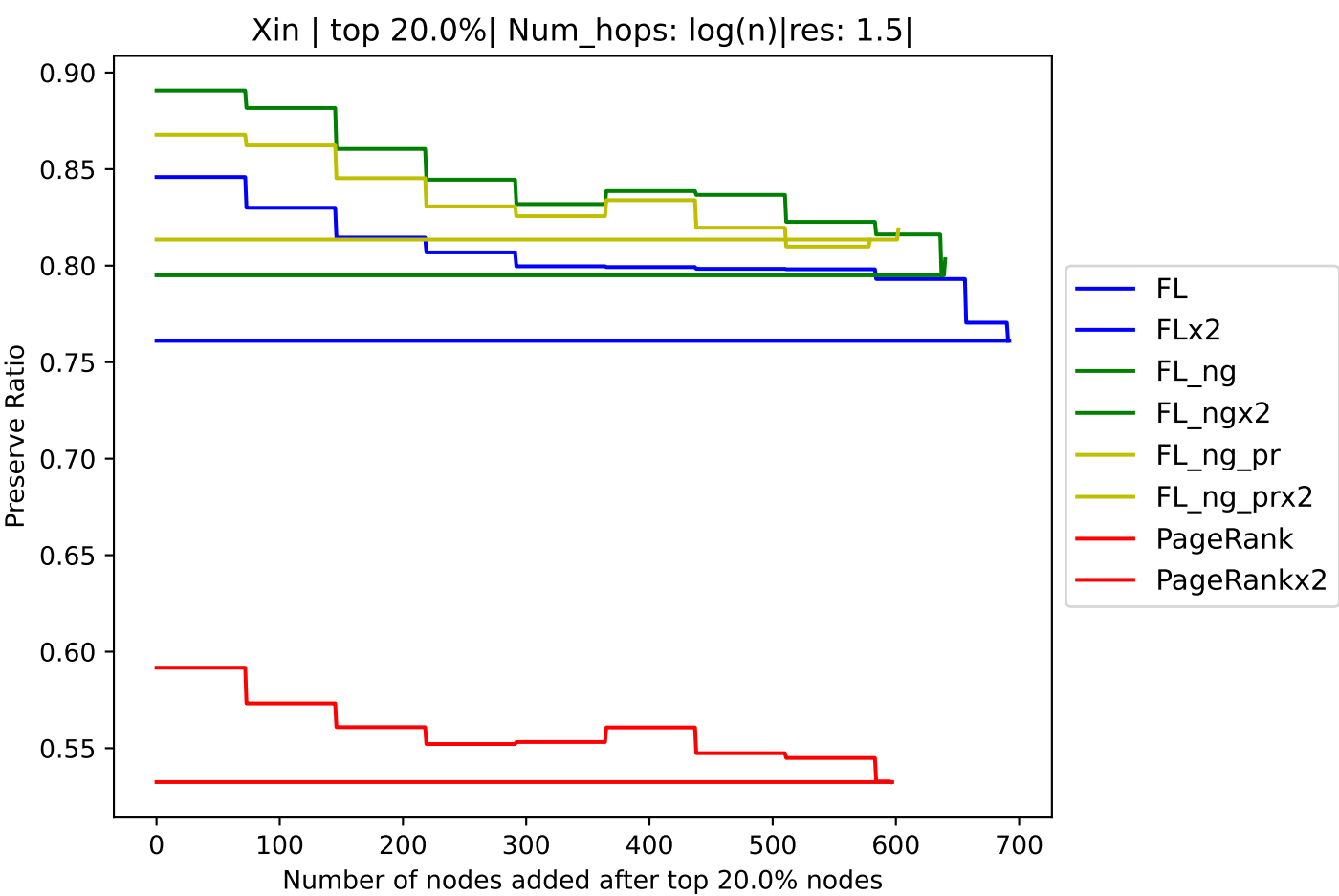
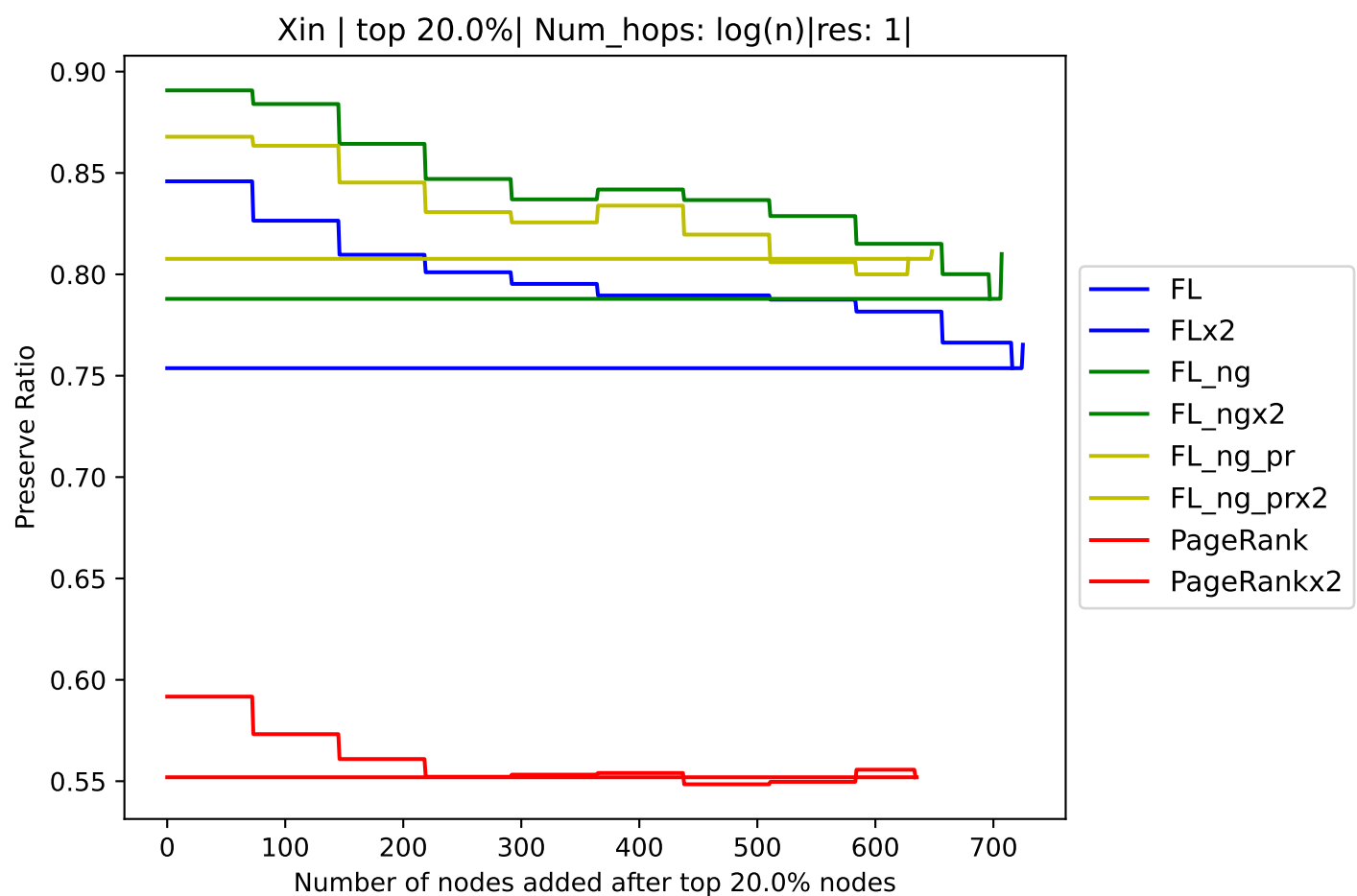
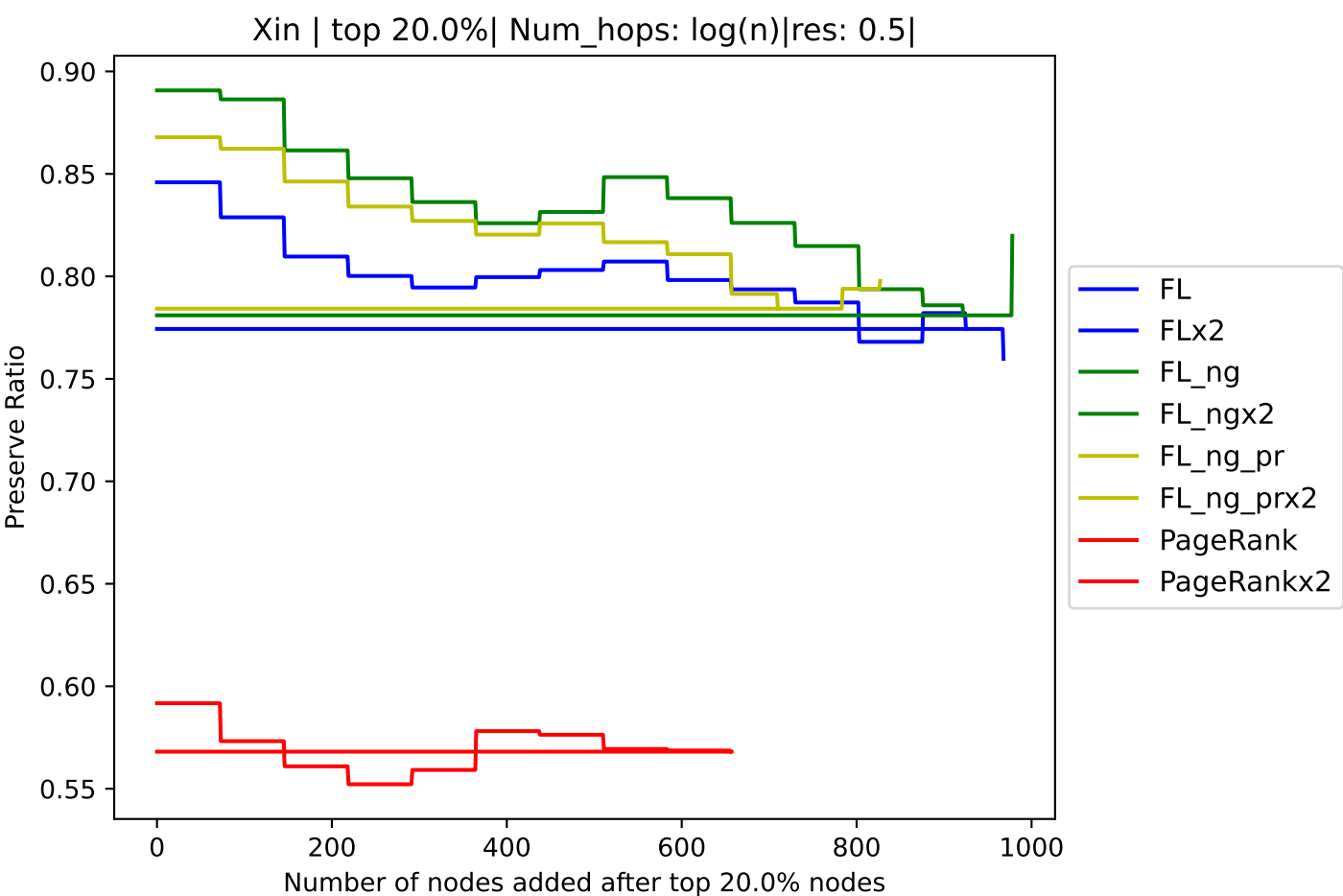
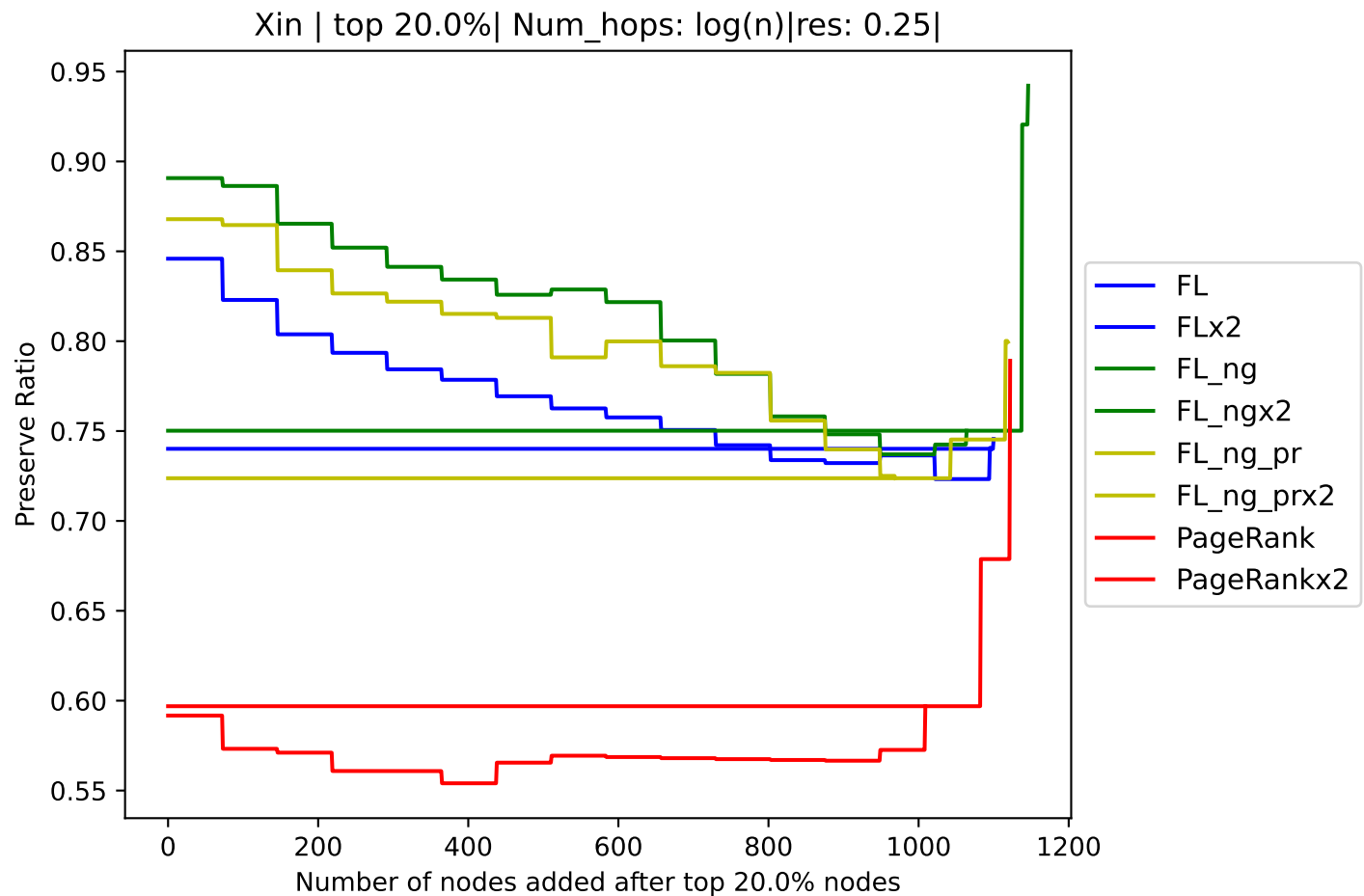
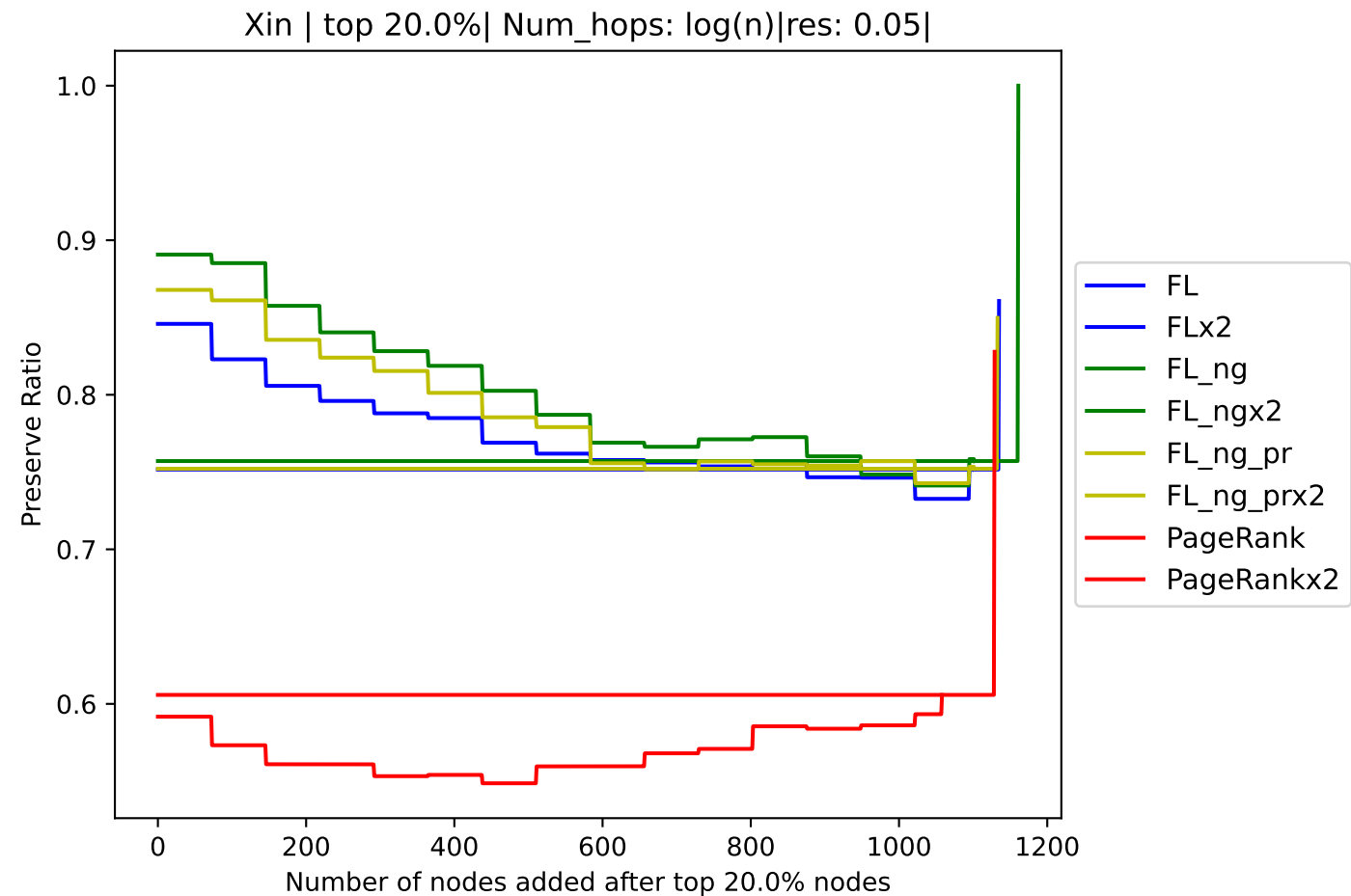


FL|67.63% nodes
 FLx2|67.63% nodes
 Louv_baseline
 Leiden_baseline
 FL_ng|63.91% nodes
 FL_ngx2|64.04% nodes
 FL_ng_pr|59.9% nodes
 FL_ng_prx2|61.42% nodes
 PageRank|61.08% nodes
 PageRankx2|61.08% nodes

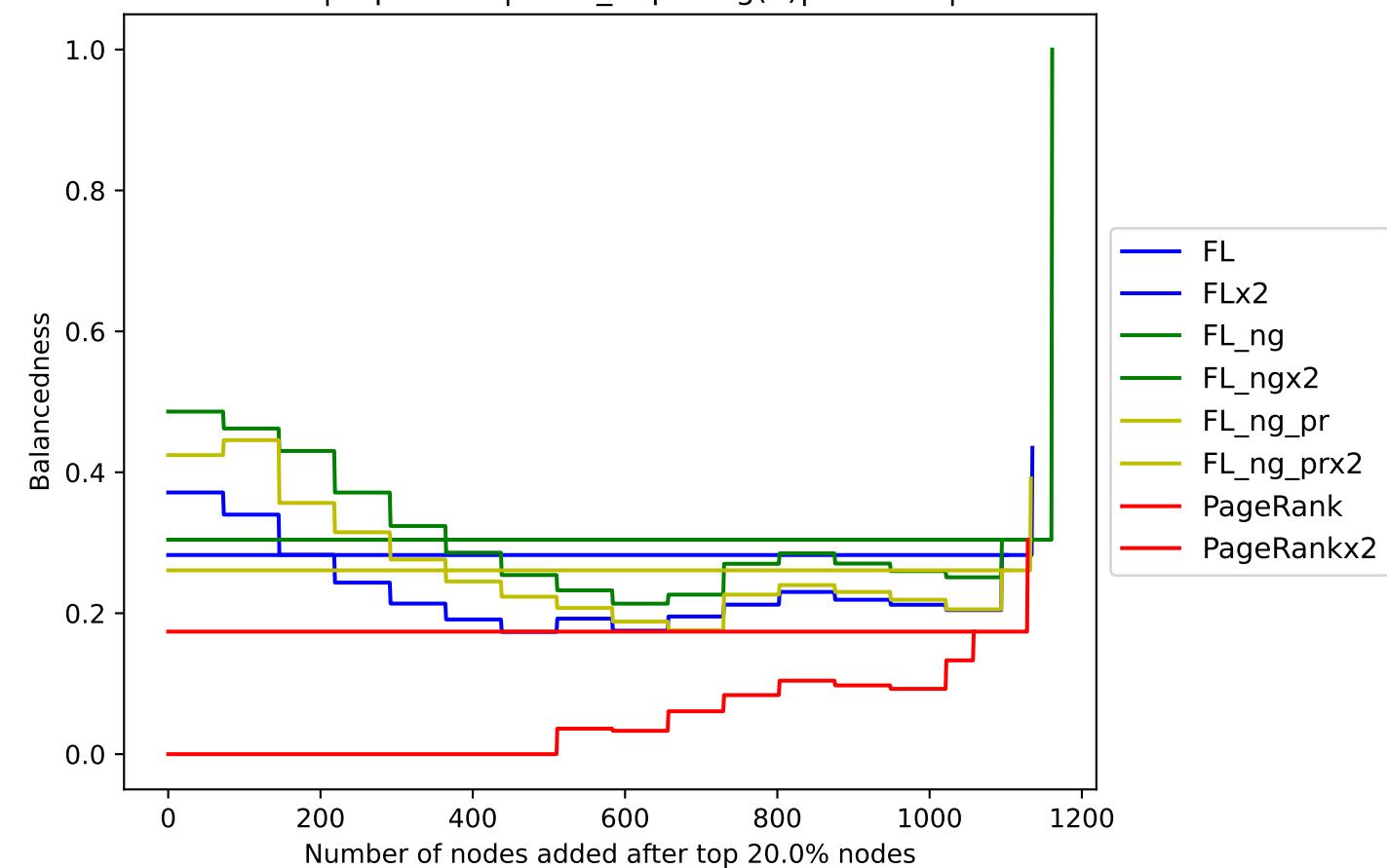
Xin | top 20.0%| Num_hops: log(n)|res: 5|



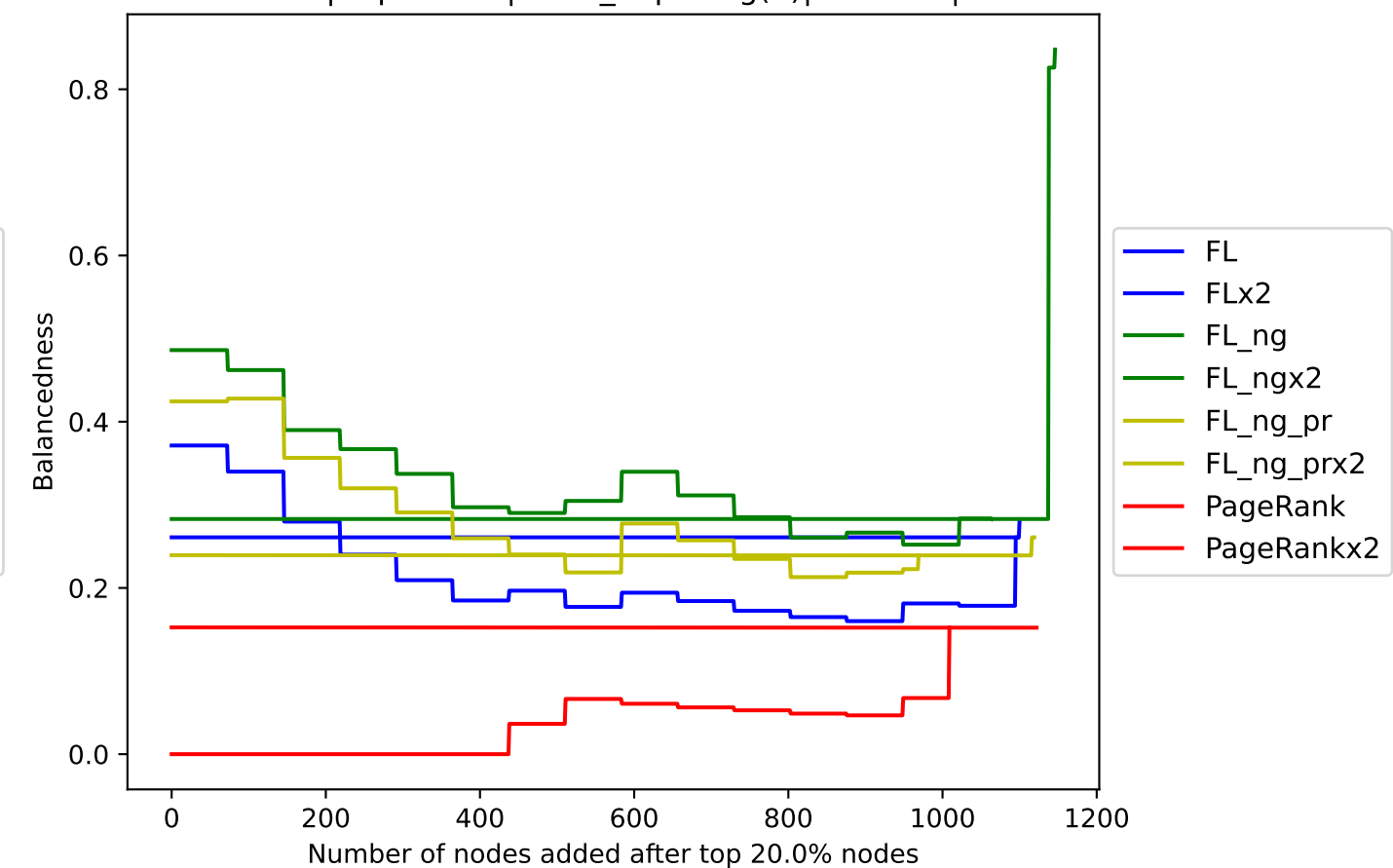
FL|46.79% nodes
 FLx2|52.31% nodes
 Louv_baseline
 Leiden_baseline
 FL_ng|52.1% nodes
 FL_ngx2|52.1% nodes
 FL_ng_pr|47.27% nodes
 FL_ng_prx2|51.14% nodes
 PageRank|44.65% nodes
 PageRankx2|50.03% nodes



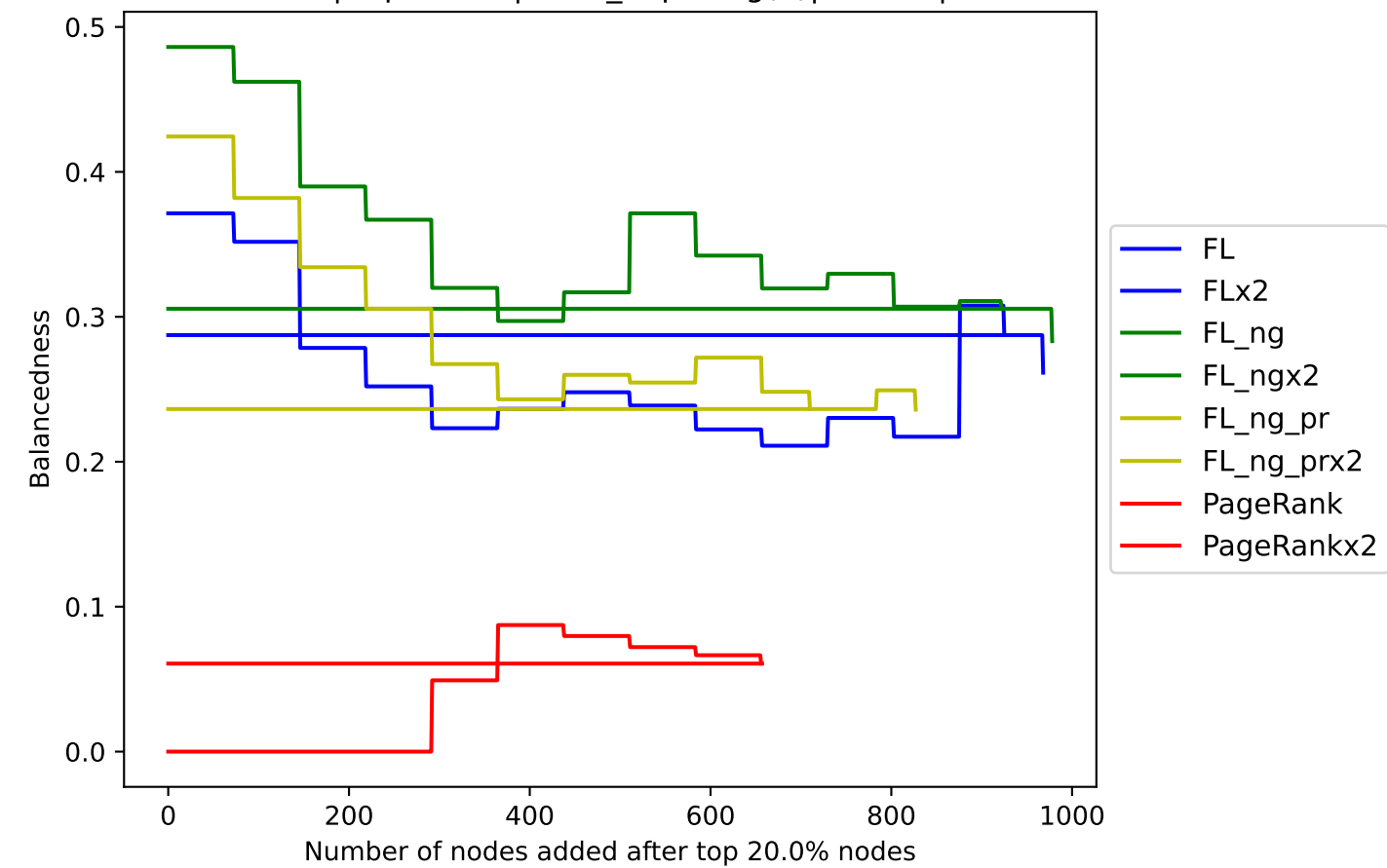
Xin | top 20.0%| Num_hops: log(n)|res: 0.05|



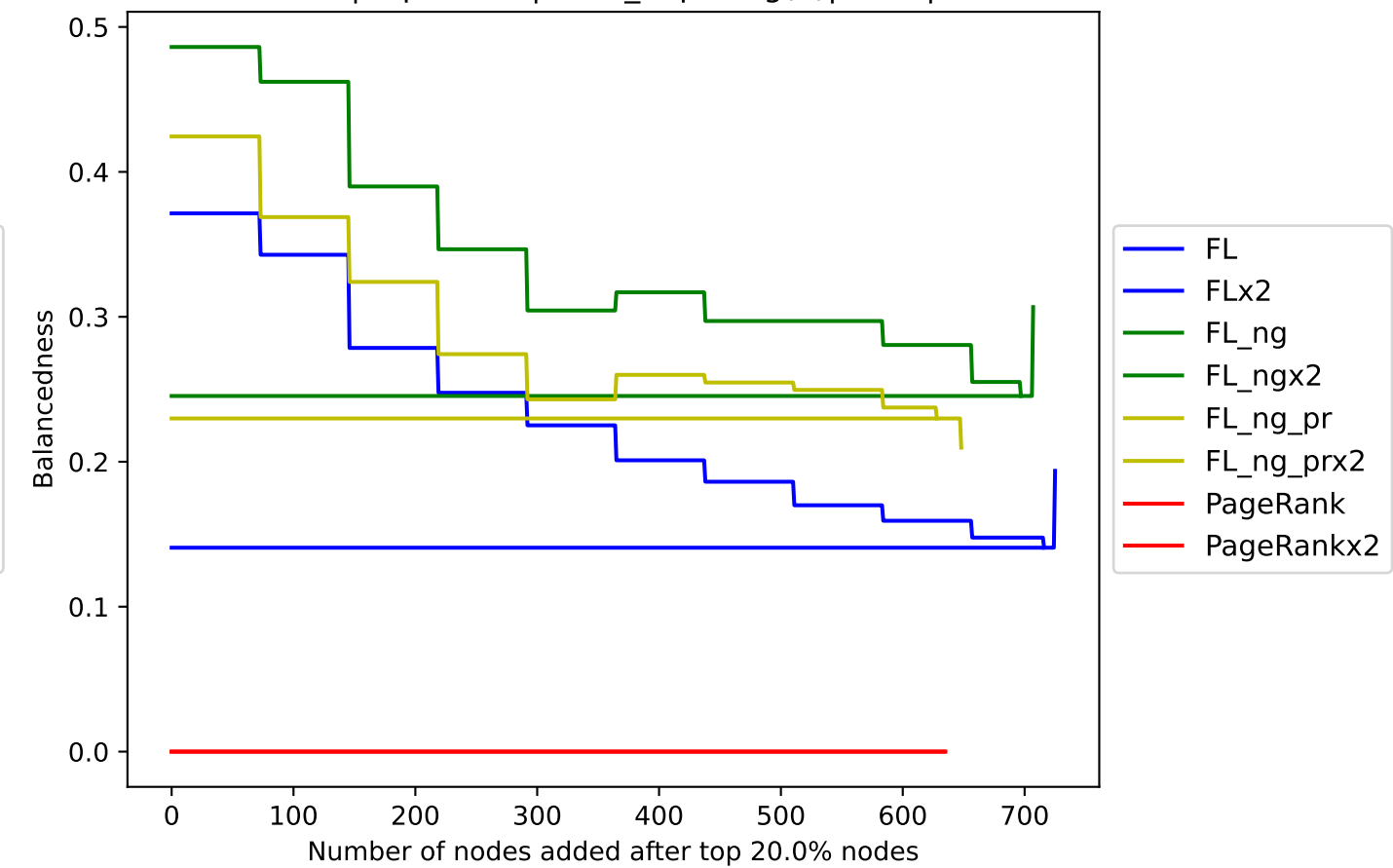
Xin | top 20.0%| Num_hops: log(n)|res: 0.25|



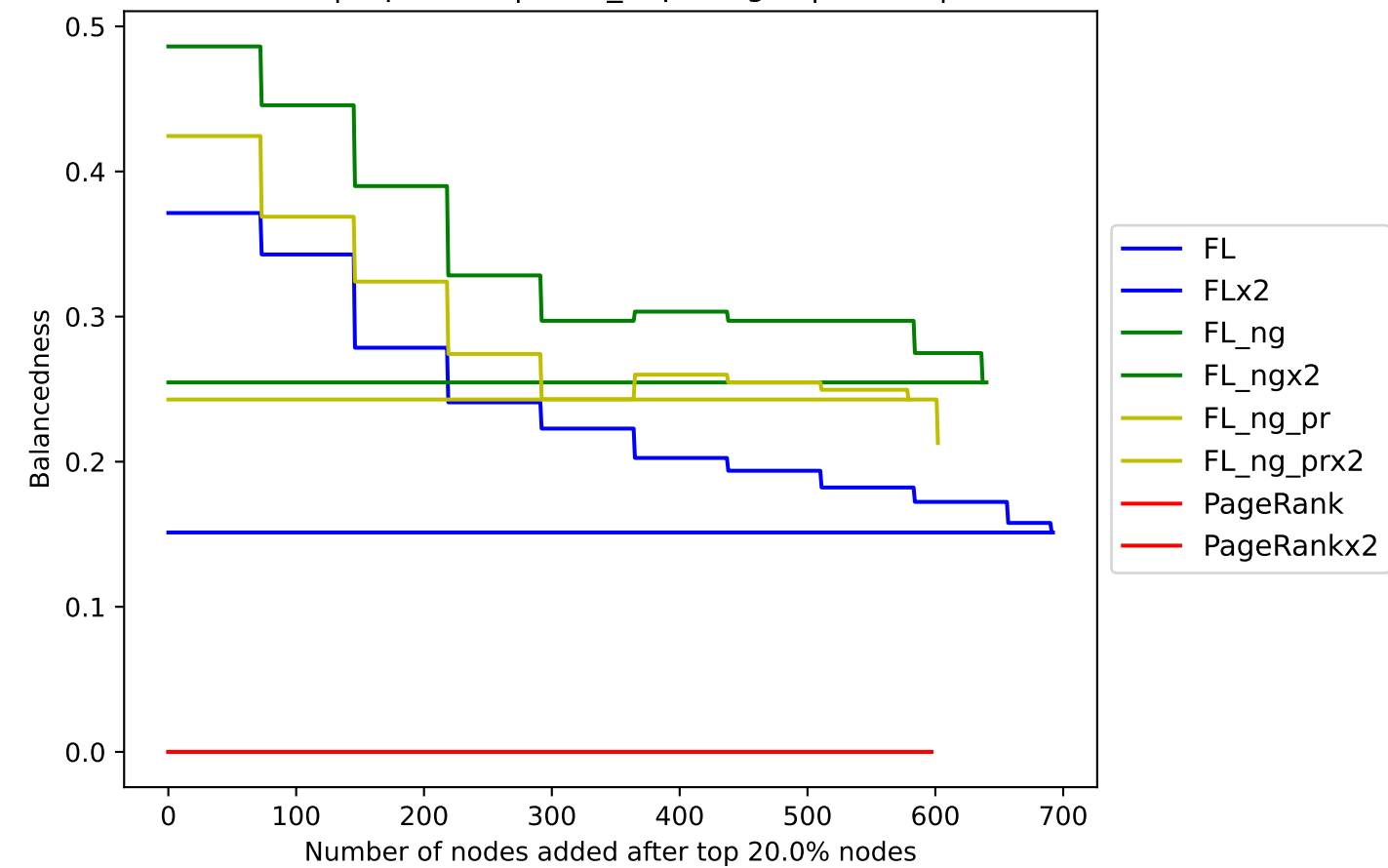
Xin | top 20.0%| Num_hops: log(n)|res: 0.5|



Xin | top 20.0%| Num_hops: log(n)|res: 1|



Xin | top 20.0%| Num_hops: log(n)|res: 1.5|



Xin | top 20.0%| Num_hops: log(n)|res: 5|

