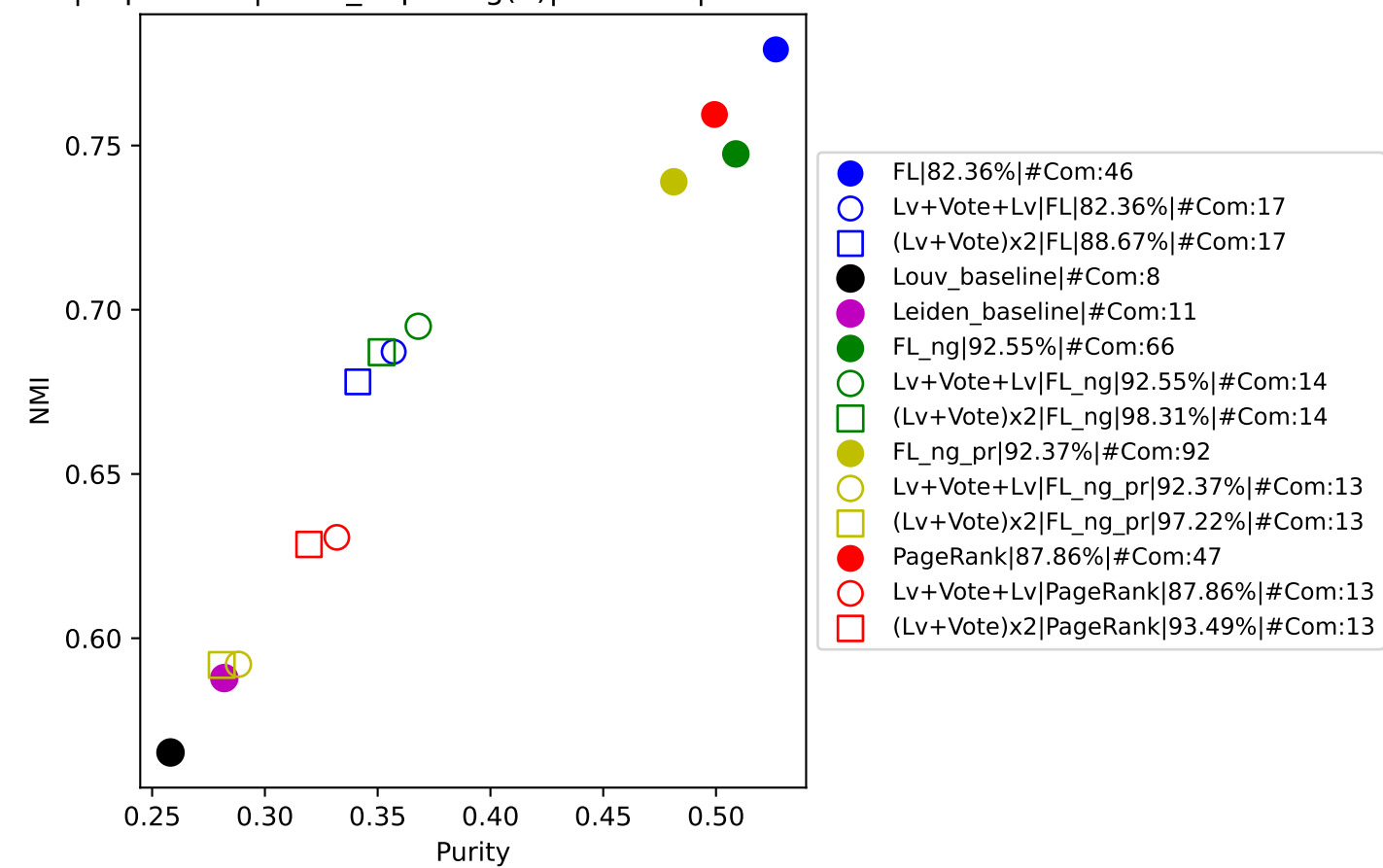
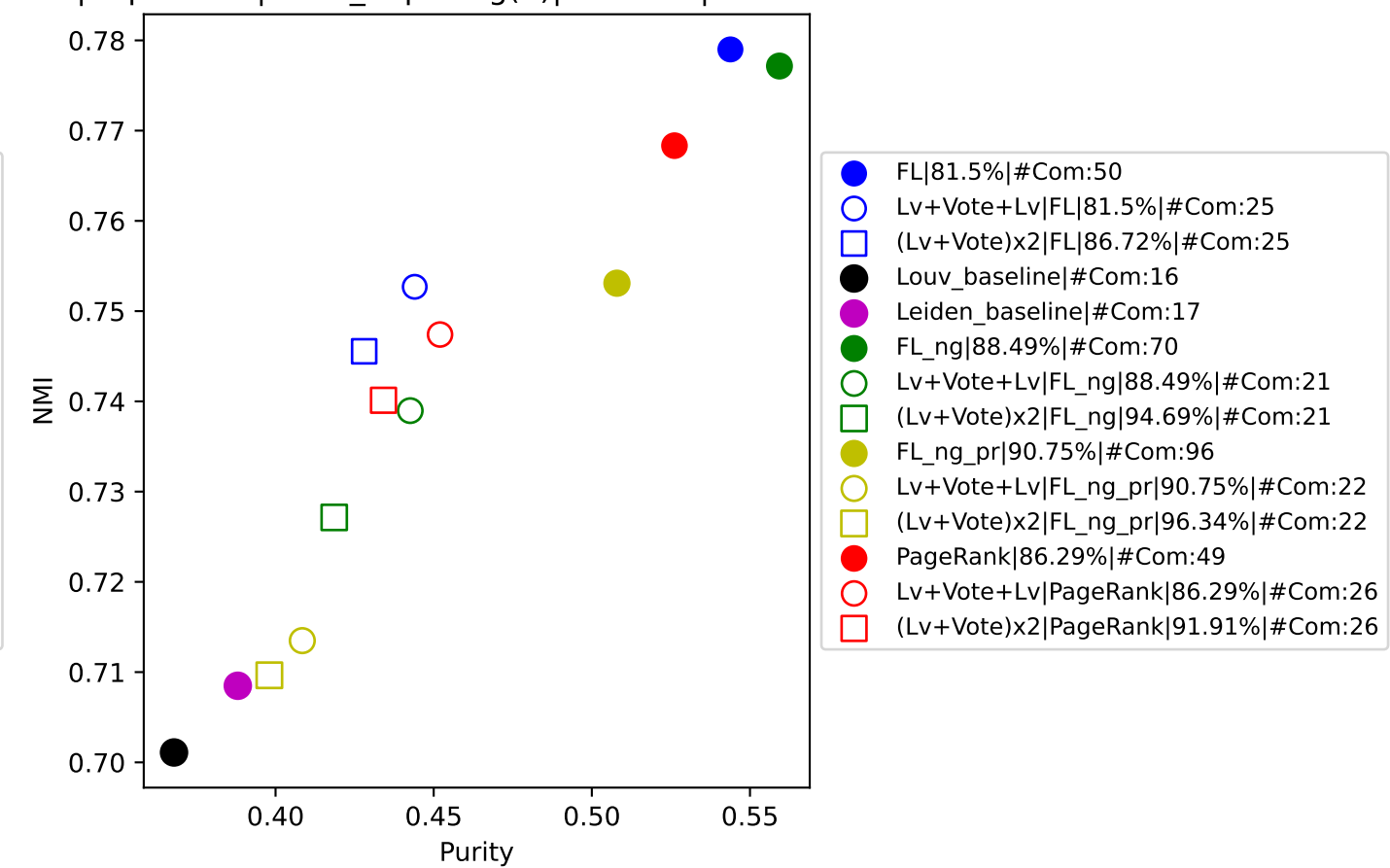


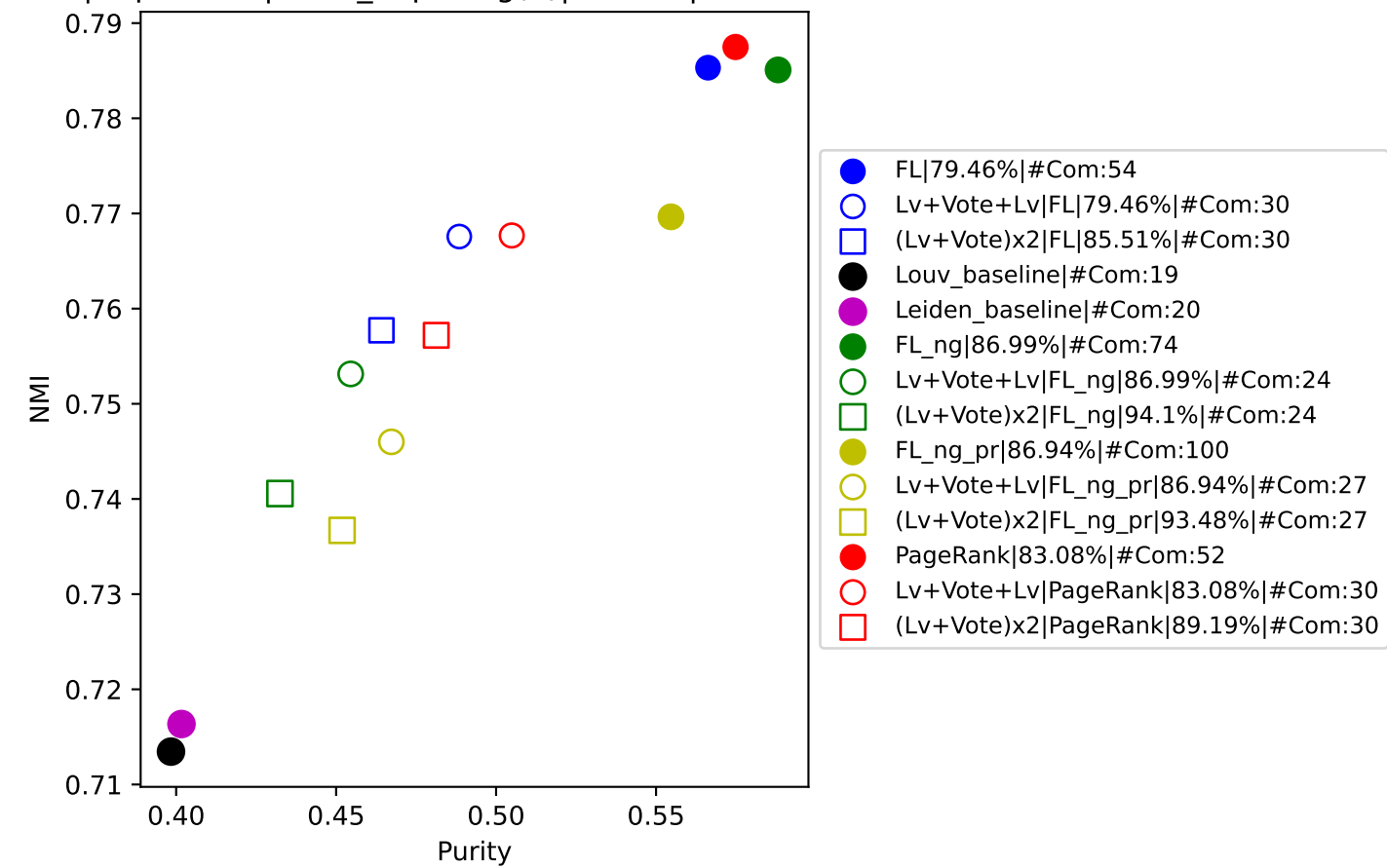
ALM | top 20.0%| Num\_hops: log(n)|res: 0.05|#OfComm: 136



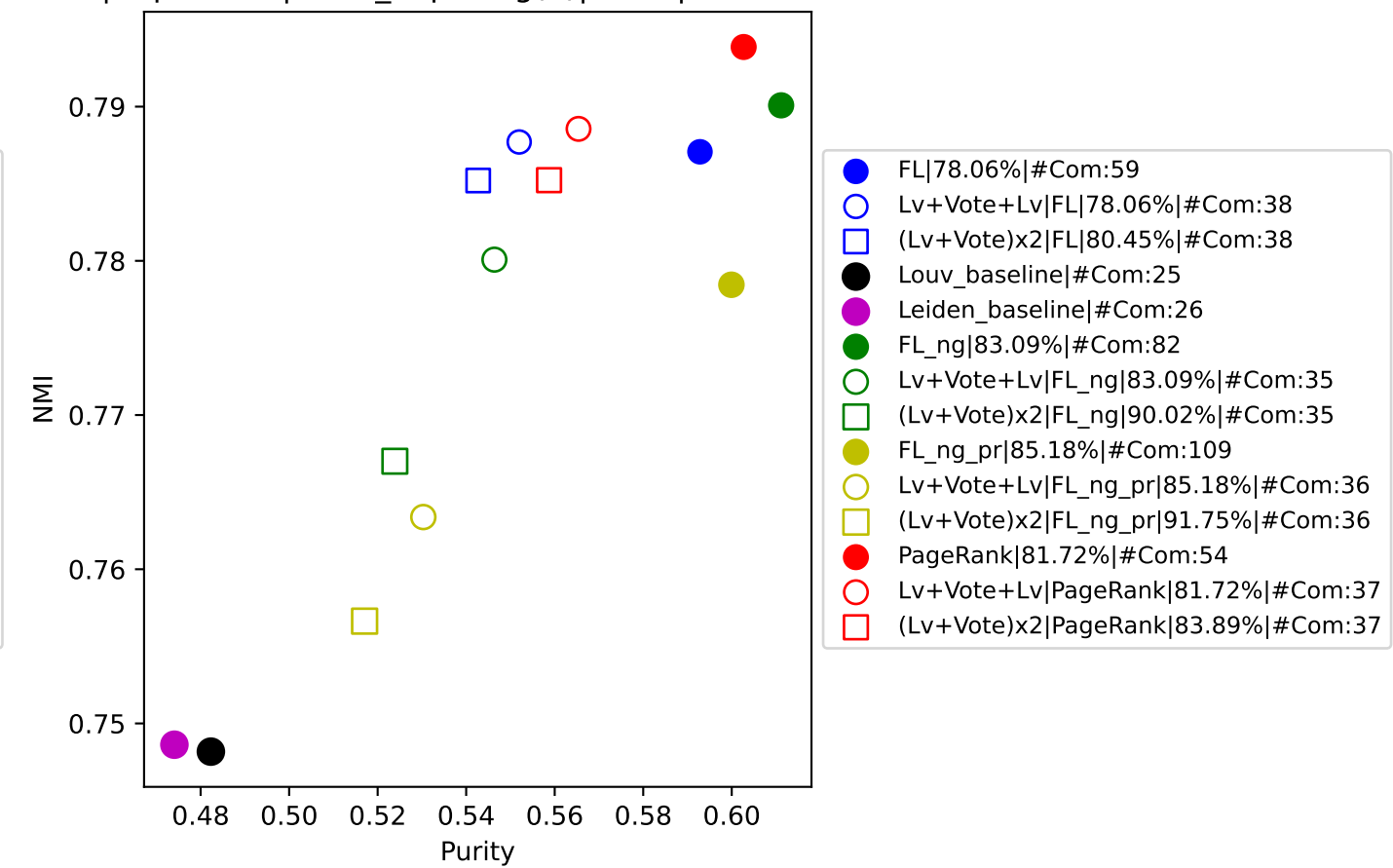
ALM | top 20.0%| Num\_hops: log(n)|res: 0.25|#OfComm: 136



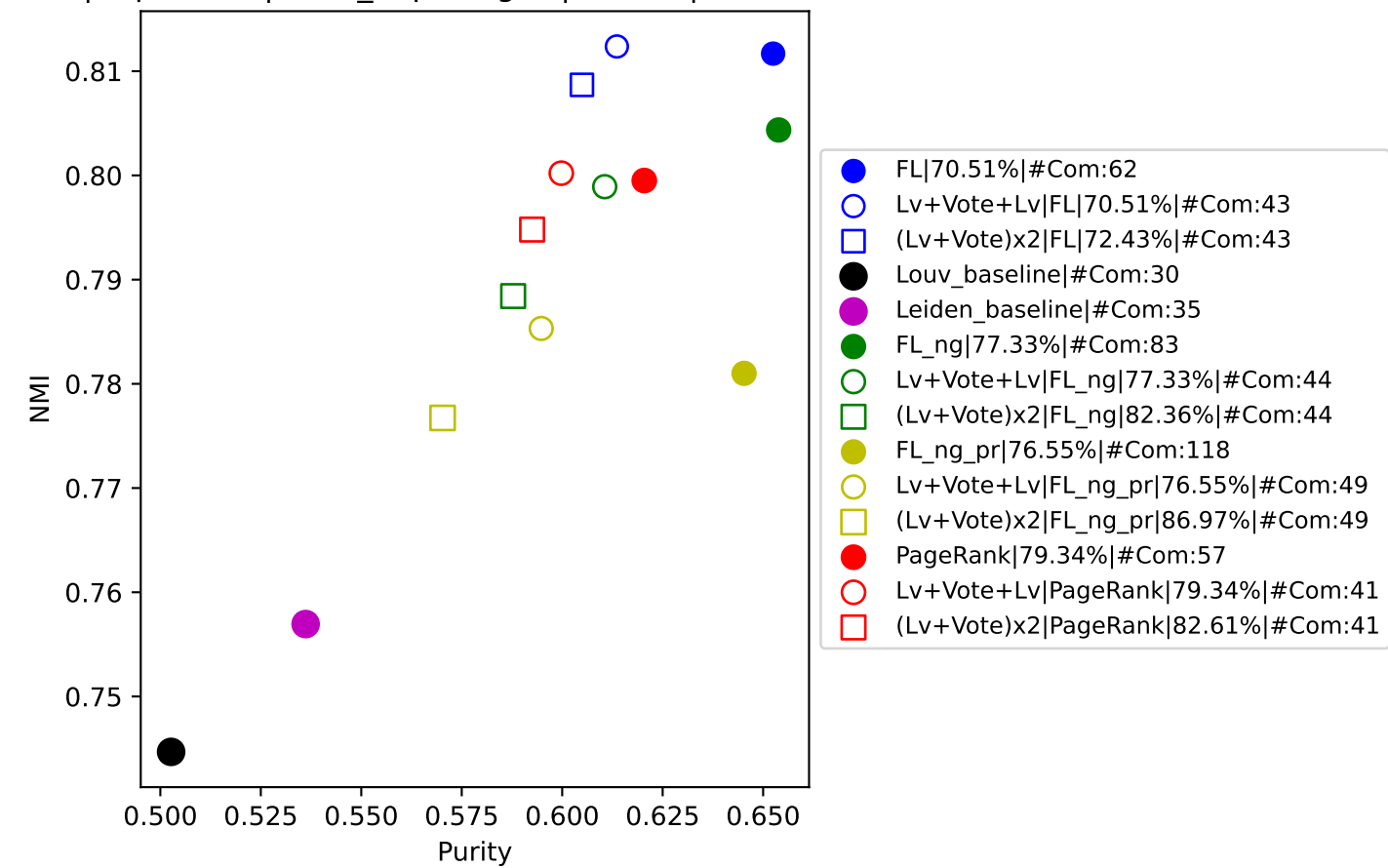
ALM | top 20.0%| Num\_hops: log(n)|res: 0.5|#OfComm: 136



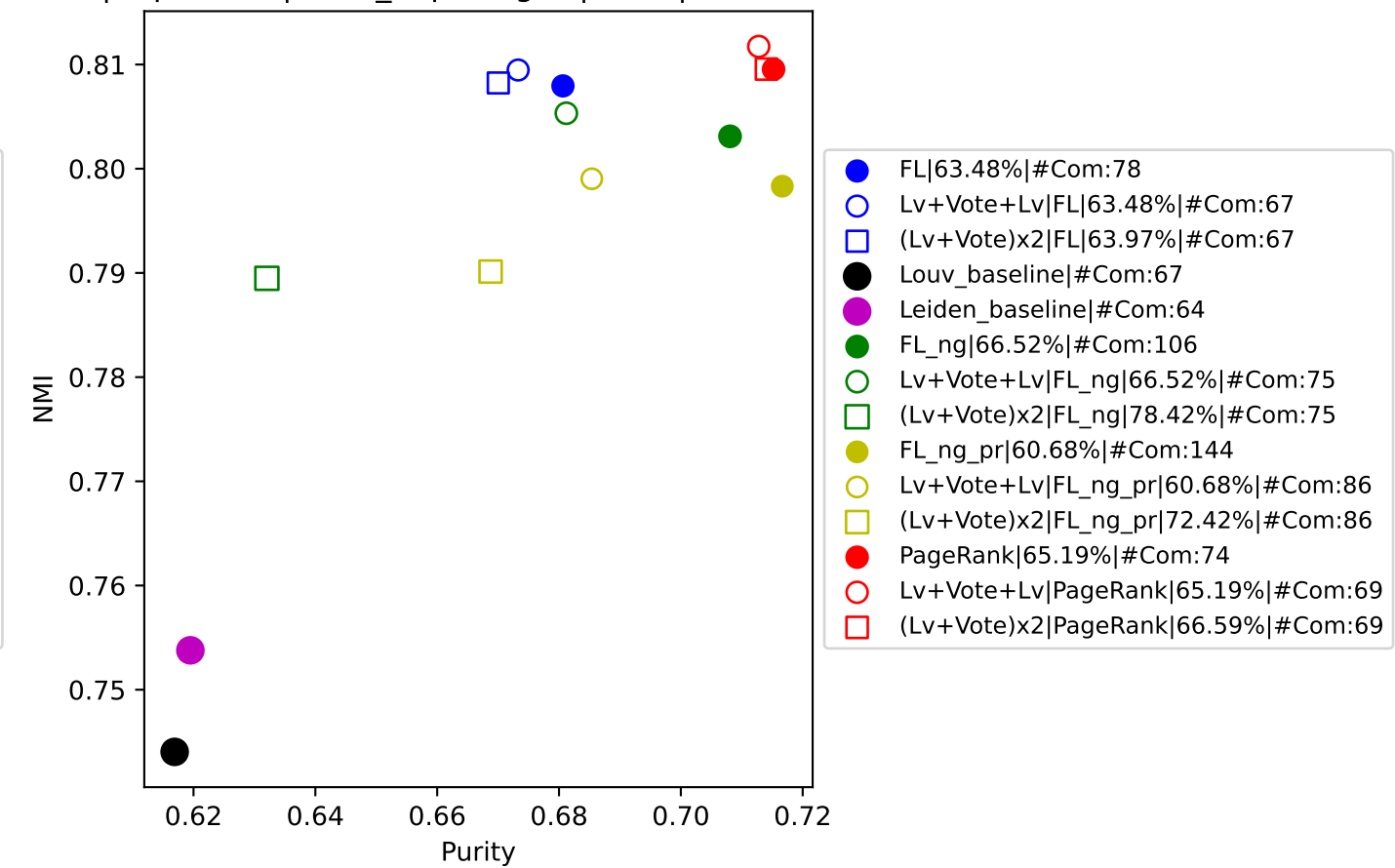
ALM | top 20.0%| Num\_hops: log(n)|res: 1|#OfComm: 136



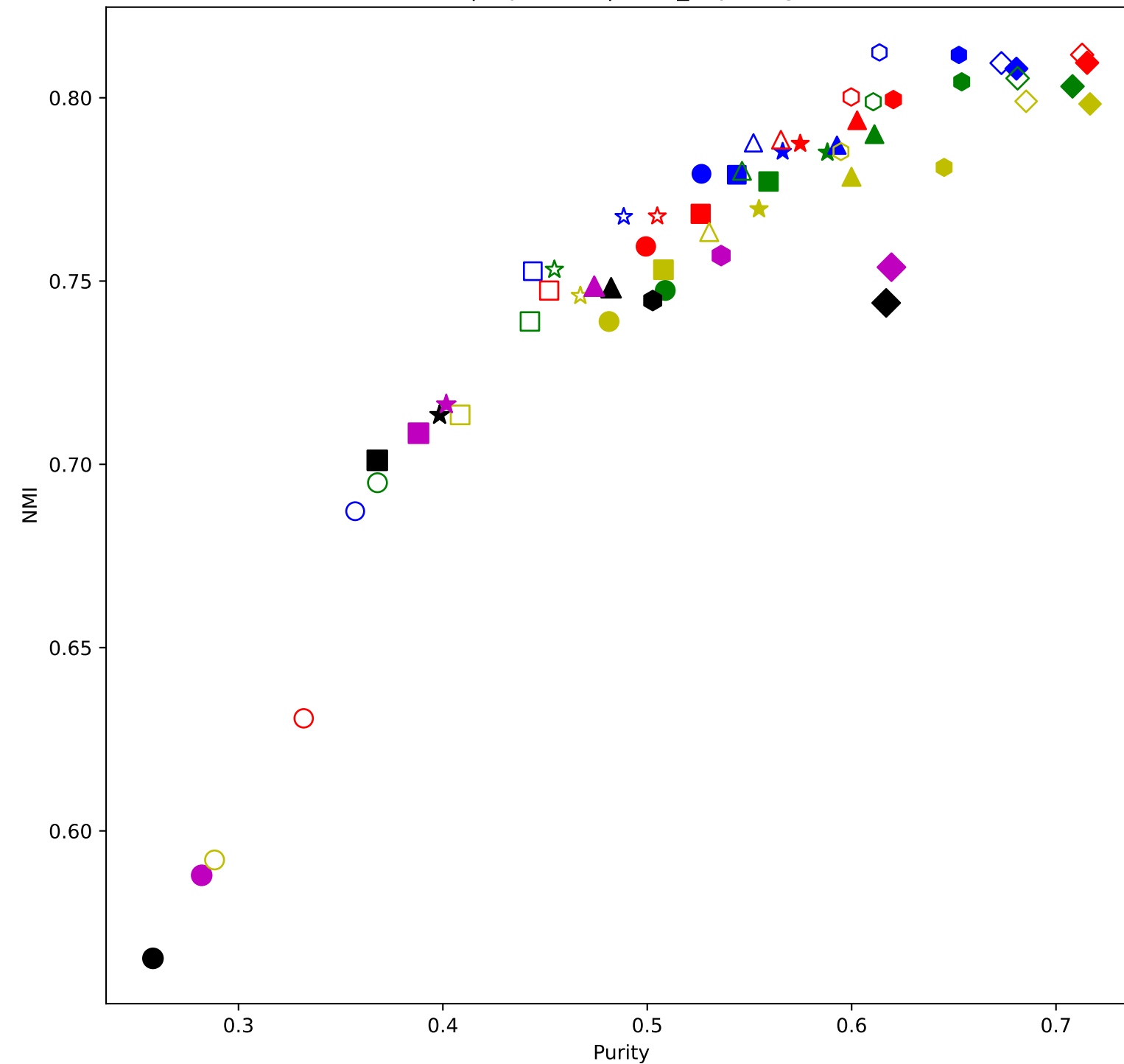
ALM | top 20.0%| Num\_hops: log(n)|res: 1.5|#OfComm: 136



ALM | top 20.0%| Num\_hops: log(n)|res: 5|#OfComm: 136

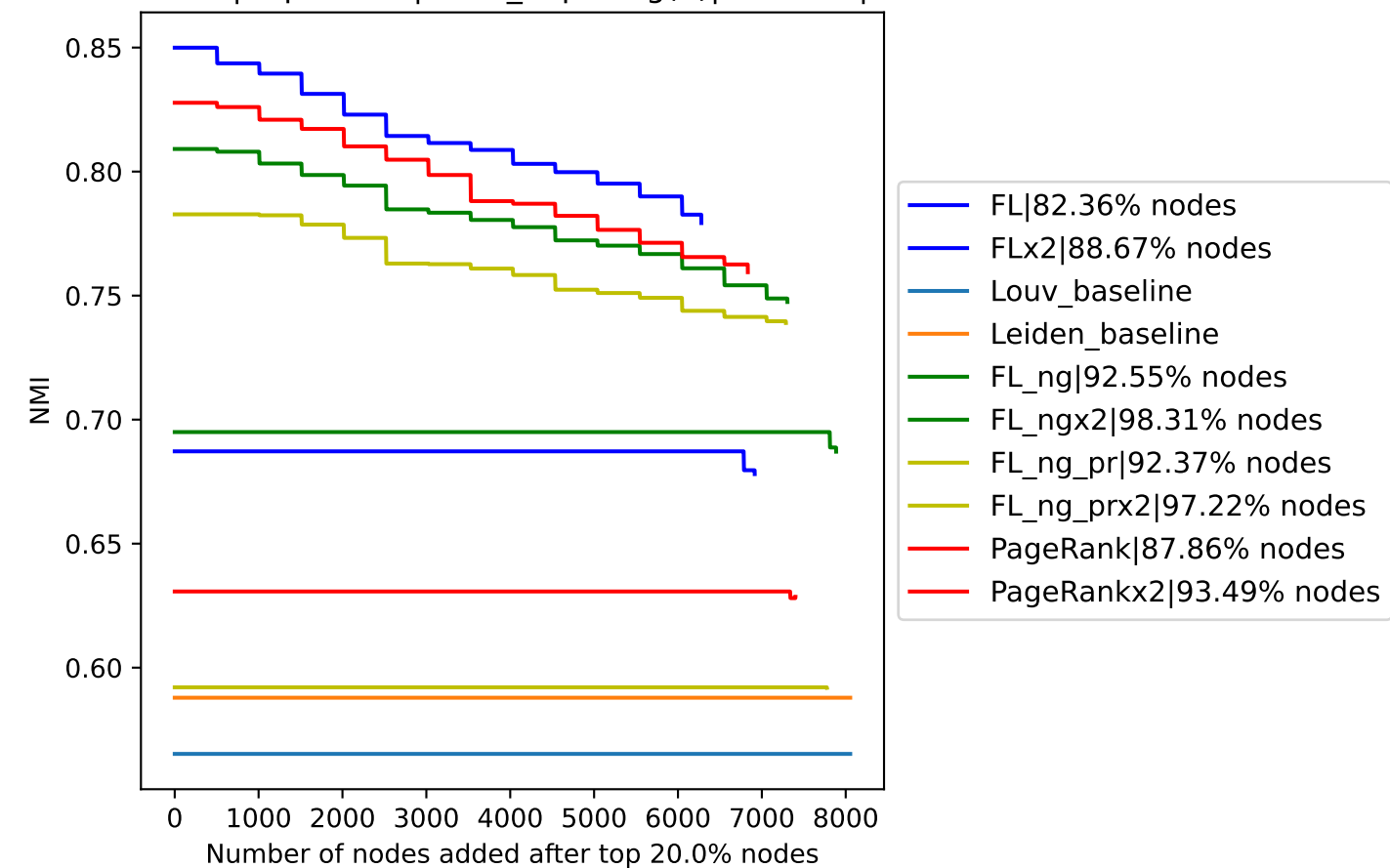


ALM | top 20.0%| Num\_hops: log(n)

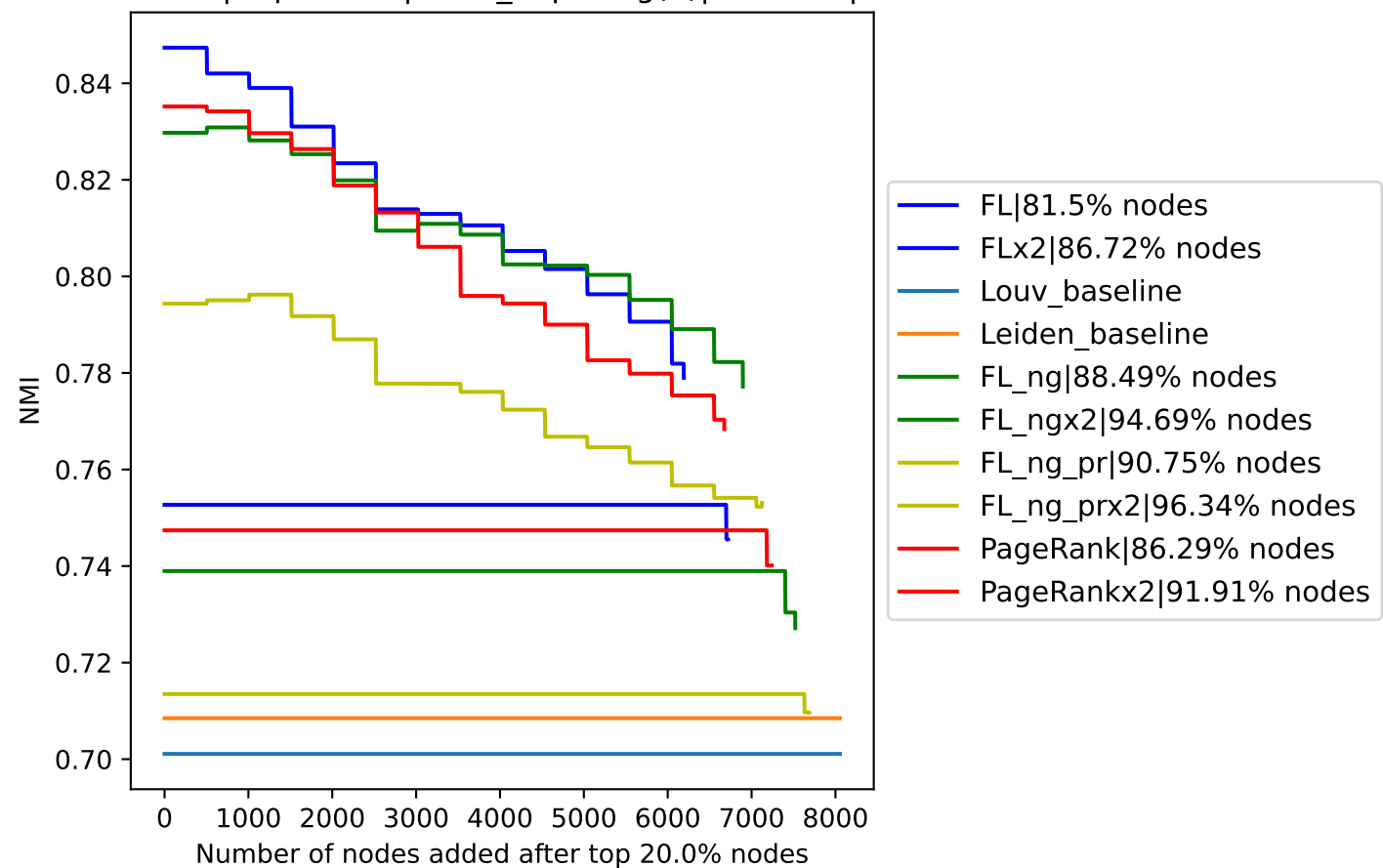


- |                                   |                                  |
|-----------------------------------|----------------------------------|
| ● FL 0.05 82.36%                  | ▲ FL 1 78.06%                    |
| ○ Lv+Vote+Lv FL 0.05 82.36%       | △ Lv+Vote+Lv FL 1 78.06%         |
| ● Louv_baseline 0.05              | ▲ Louv_baseline 1                |
| ● Leiden_baseline 0.05            | ▲ Leiden_baseline 1              |
| ● FL_ng 0.05 92.55%               | ▲ FL_ng 1 83.09%                 |
| ○ Lv+Vote+Lv FL_ng 0.05 92.55%    | △ Lv+Vote+Lv FL_ng 1 83.09%      |
| ● FL_ng_pr 0.05 92.37%            | ▲ FL_ng_pr 1 85.18%              |
| ○ Lv+Vote+Lv FL_ng_pr 0.05 92.37% | △ Lv+Vote+Lv FL_ng_pr 1 85.18%   |
| ● PageRank 0.05 87.86%            | ▲ PageRank 1 81.72%              |
| ○ Lv+Vote+Lv PageRank 0.05 87.86% | △ Lv+Vote+Lv PageRank 1 81.72%   |
| ■ FL 0.25 81.5%                   | ● FL 1.5 70.51%                  |
| □ Lv+Vote+Lv FL 0.25 81.5%        | ○ Lv+Vote+Lv FL 1.5 70.51%       |
| ■ Louv_baseline 0.25              | ● Louv_baseline 1.5              |
| ■ Leiden_baseline 0.25            | ● Leiden_baseline 1.5            |
| ■ FL_ng 0.25 88.49%               | ● FL_ng 1.5 77.33%               |
| □ Lv+Vote+Lv FL_ng 0.25 88.49%    | ○ Lv+Vote+Lv FL_ng 1.5 77.33%    |
| ■ FL_ng_pr 0.25 90.75%            | ● FL_ng_pr 1.5 76.55%            |
| □ Lv+Vote+Lv FL_ng_pr 0.25 90.75% | ○ Lv+Vote+Lv FL_ng_pr 1.5 76.55% |
| ■ PageRank 0.25 86.29%            | ● PageRank 1.5 79.34%            |
| □ Lv+Vote+Lv PageRank 0.25 86.29% | ○ Lv+Vote+Lv PageRank 1.5 79.34% |
| ★ FL 0.5 79.46%                   | ◆ FL 5 63.48%                    |
| ☆ Lv+Vote+Lv FL 0.5 79.46%        | ◇ Lv+Vote+Lv FL 5 63.48%         |
| ★ Louv_baseline 0.5               | ◆ Louv_baseline 5                |
| ★ Leiden_baseline 0.5             | ◆ Leiden_baseline 5              |
| ★ FL_ng 0.5 86.99%                | ◆ FL_ng 5 66.52%                 |
| ☆ Lv+Vote+Lv FL_ng 0.5 86.99%     | ◇ Lv+Vote+Lv FL_ng 5 66.52%      |
| ★ FL_ng_pr 0.5 86.94%             | ◆ FL_ng_pr 5 60.68%              |
| ☆ Lv+Vote+Lv FL_ng_pr 0.5 86.94%  | ◇ Lv+Vote+Lv FL_ng_pr 5 60.68%   |
| ★ PageRank 0.5 83.08%             | ◆ PageRank 5 65.19%              |
| ☆ Lv+Vote+Lv PageRank 0.5 83.08%  | ◇ Lv+Vote+Lv PageRank 5 65.19%   |

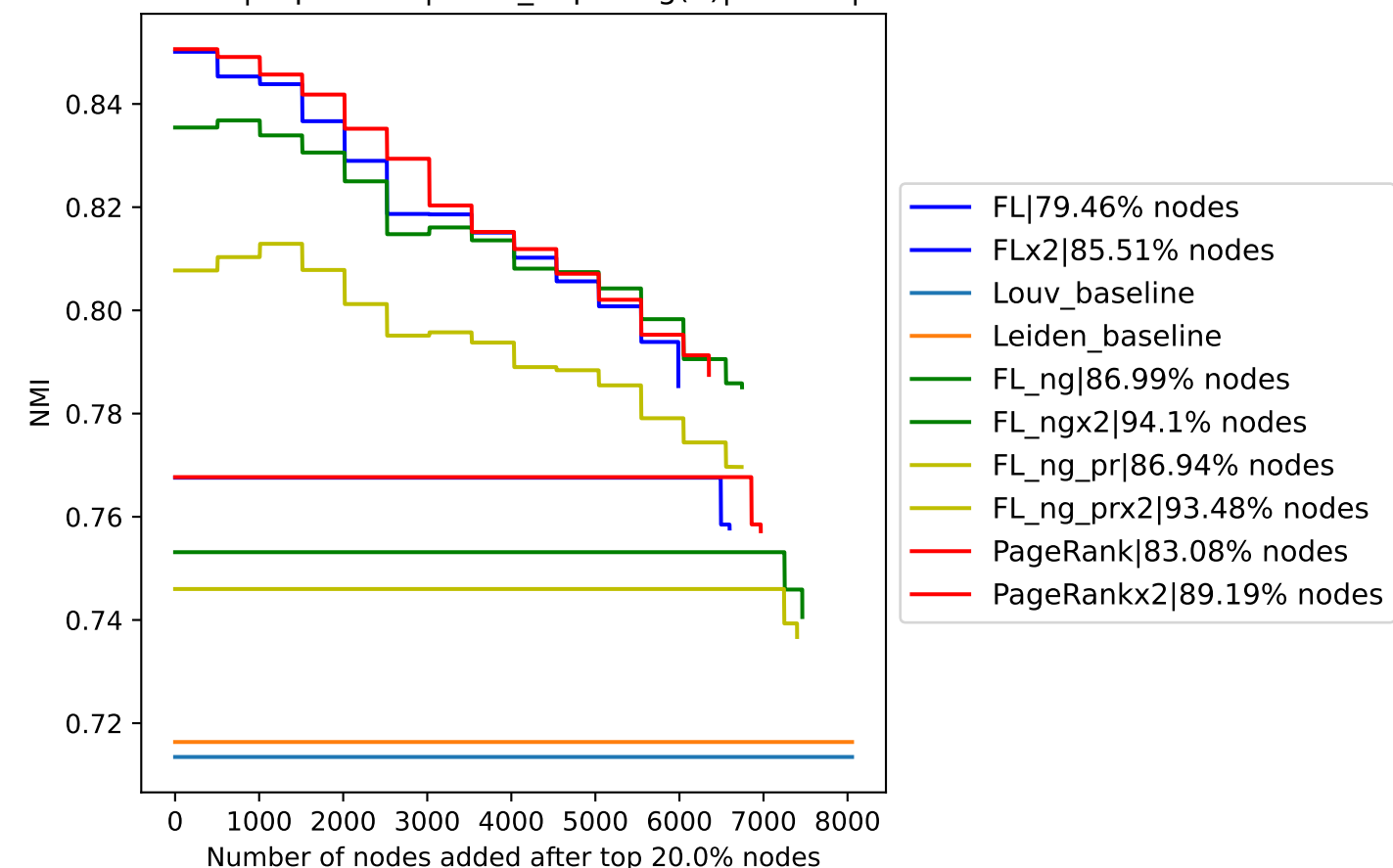
ALM | top 20.0%| Num\_hops: log(n)|res: 0.05|



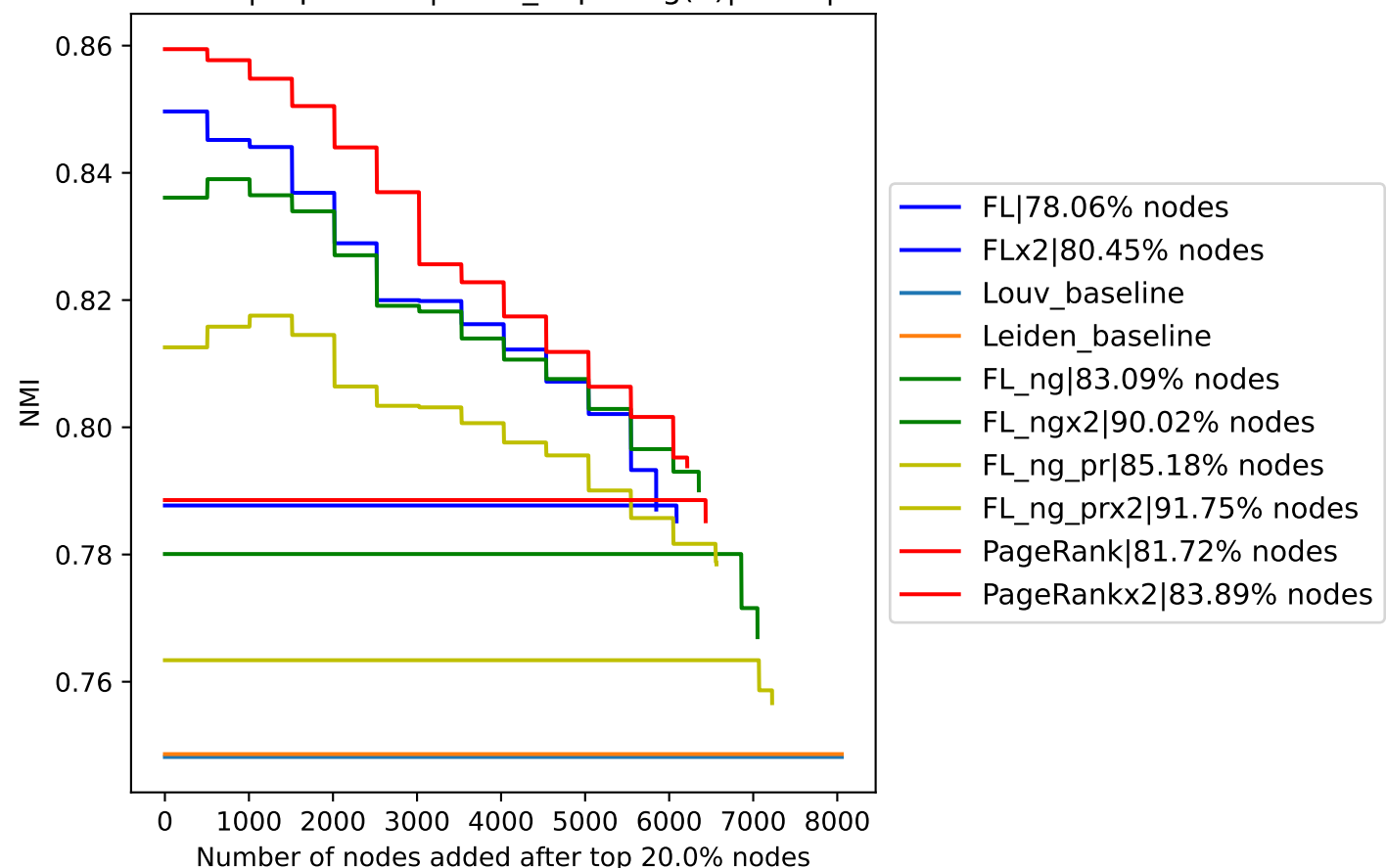
ALM | top 20.0%| Num\_hops: log(n)|res: 0.25|



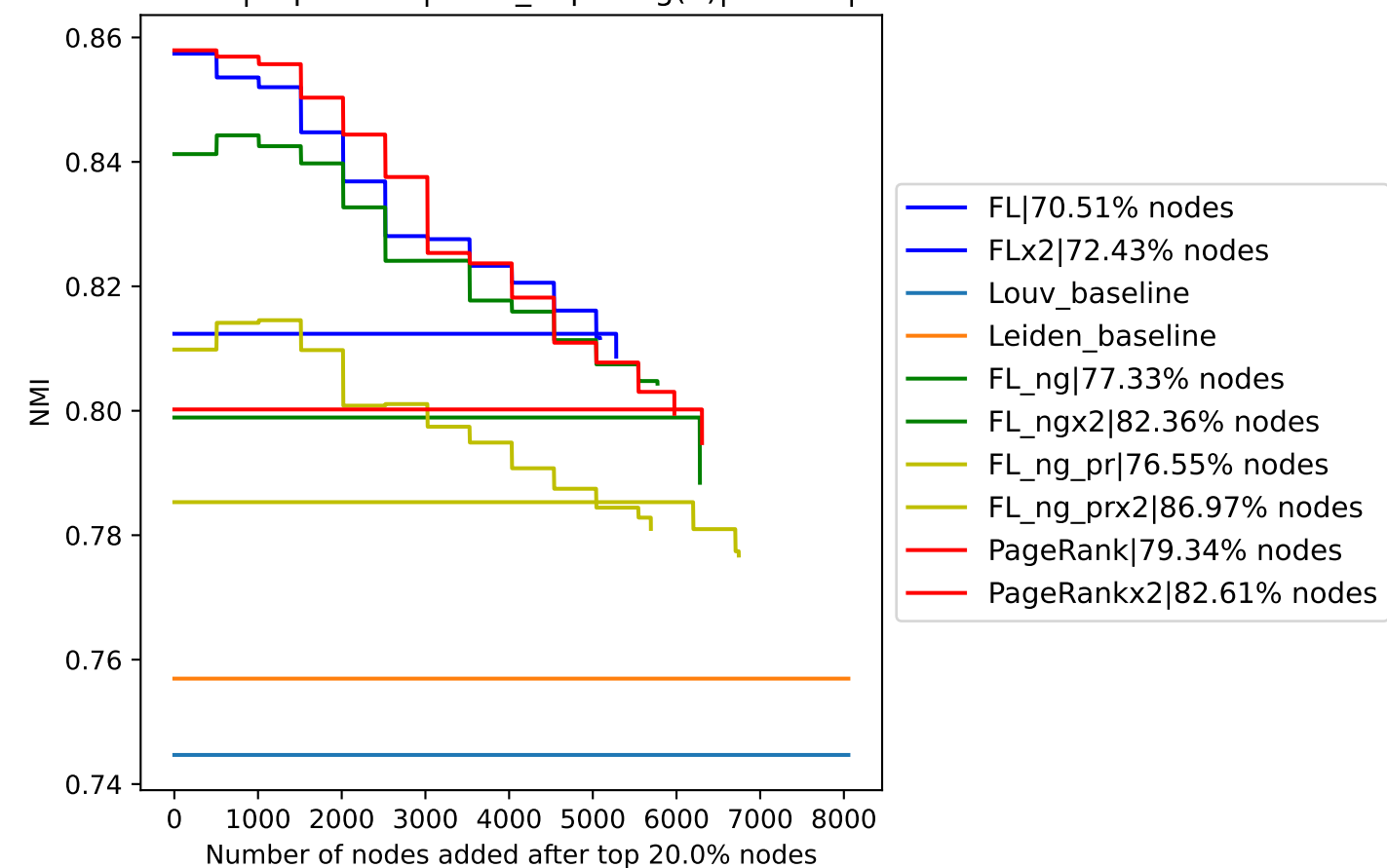
ALM | top 20.0%| Num\_hops: log(n)|res: 0.5|



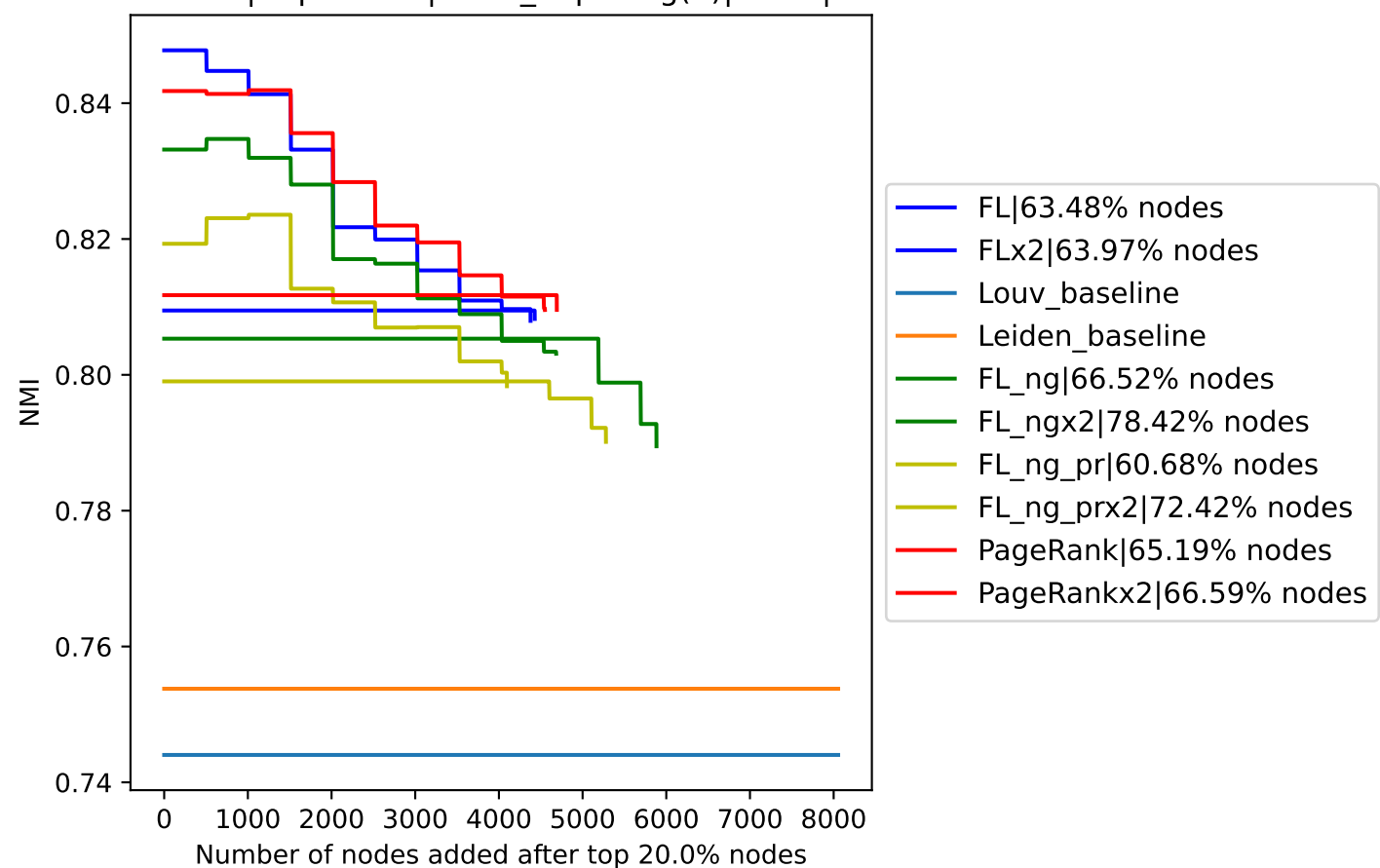
ALM | top 20.0%| Num\_hops: log(n)|res: 1|



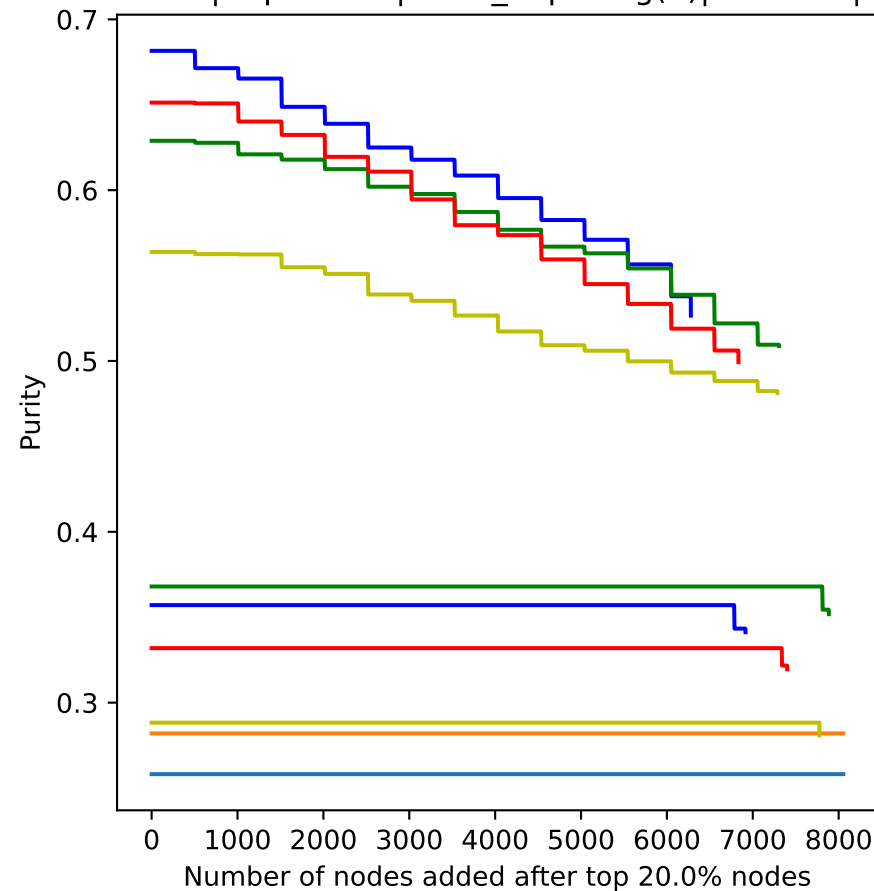
ALM | top 20.0%| Num\_hops: log(n)|res: 1.5|



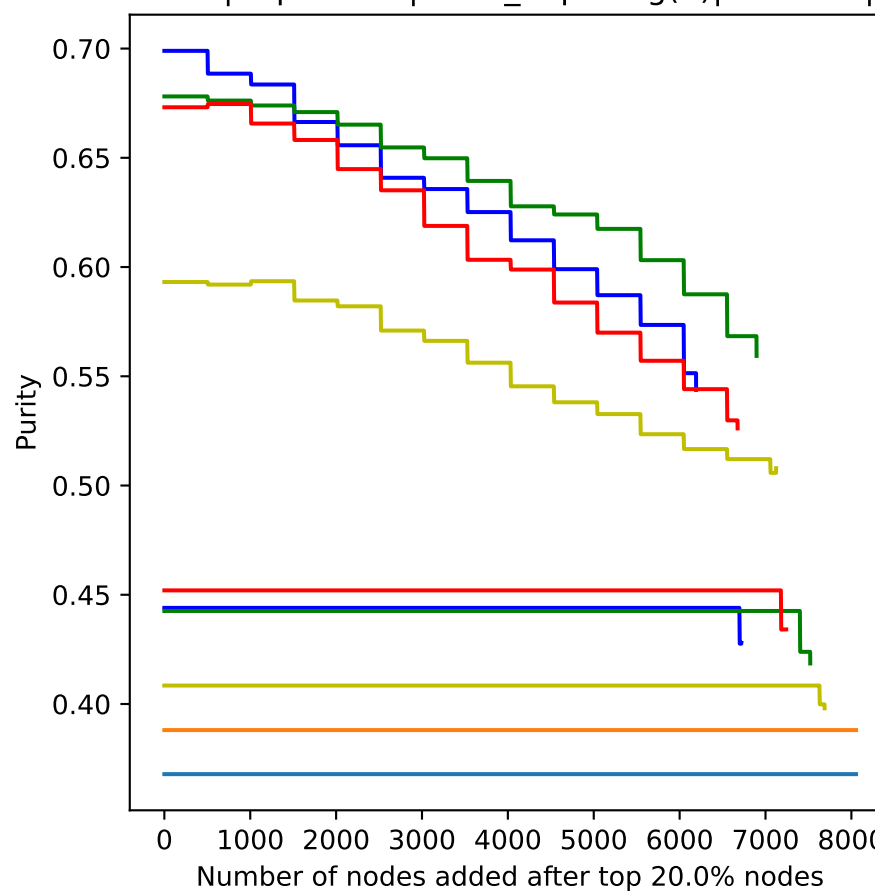
ALM | top 20.0%| Num\_hops: log(n)|res: 5|



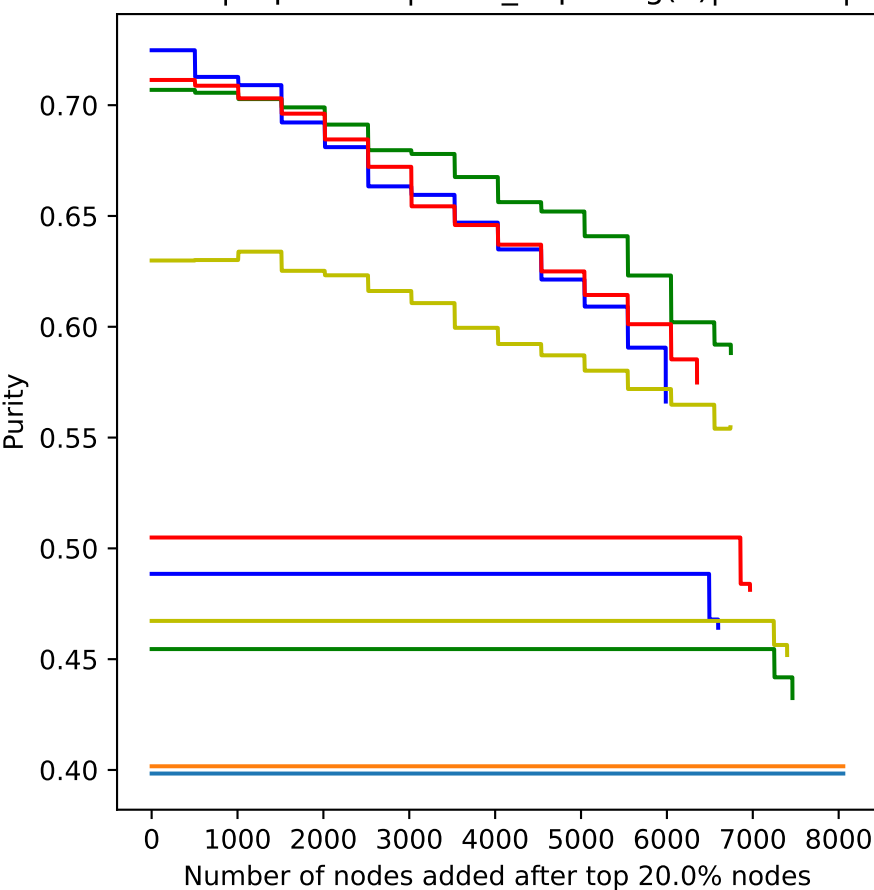
ALM | top 20.0%| Num\_hops: log(n)|res: 0.05|



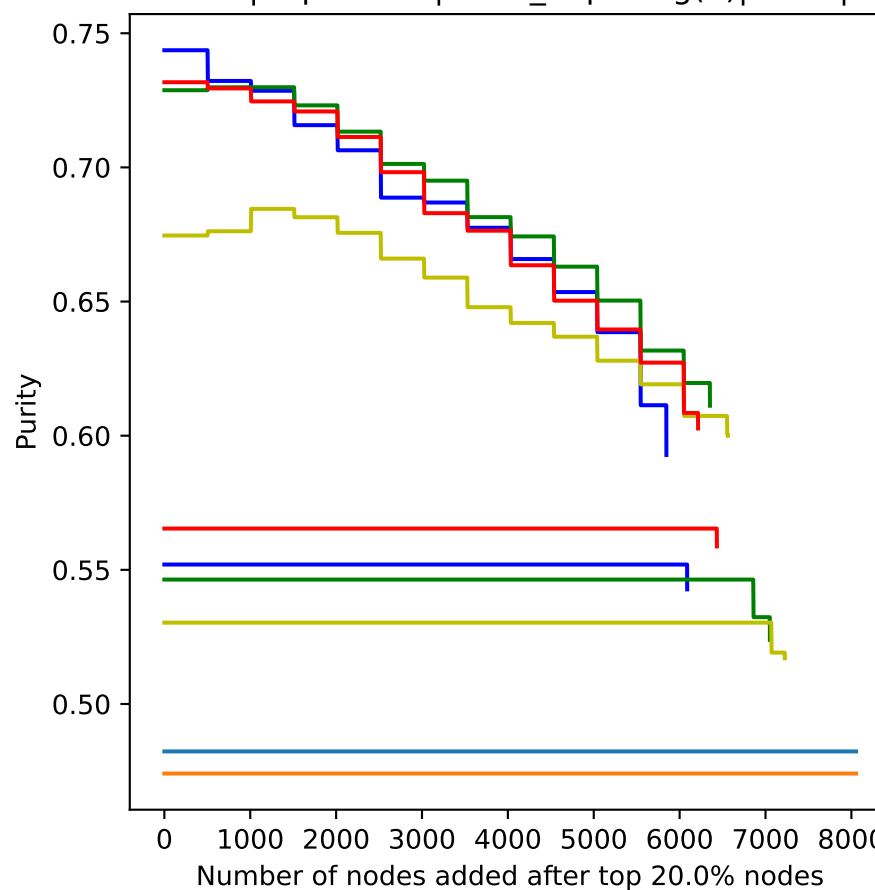
ALM | top 20.0%| Num\_hops: log(n)|res: 0.25|



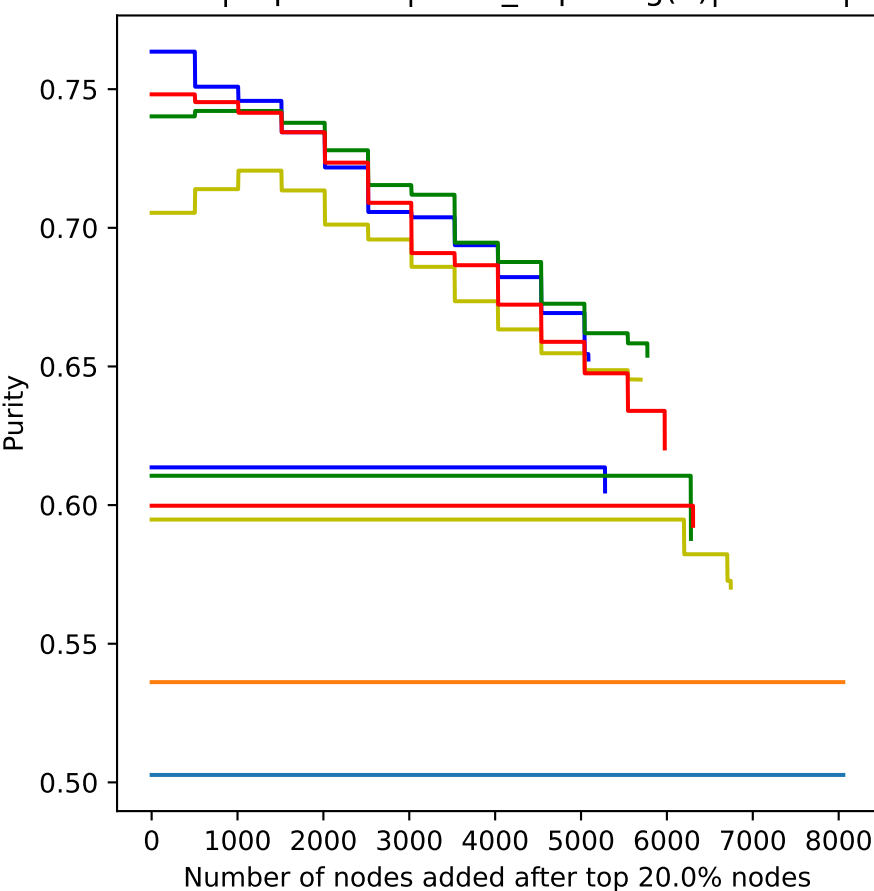
ALM | top 20.0%| Num\_hops: log(n)|res: 0.5|



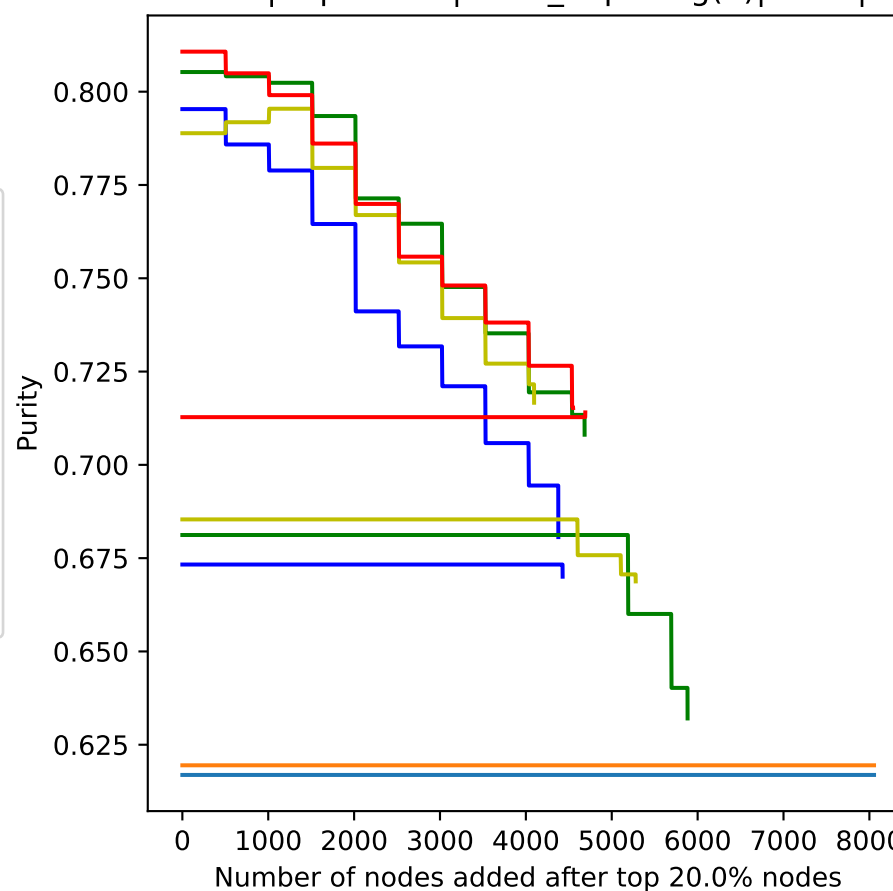
ALM | top 20.0%| Num\_hops: log(n)|res: 1|



ALM | top 20.0%| Num\_hops: log(n)|res: 1.5|



ALM | top 20.0%| Num\_hops: log(n)|res: 5|



FL|82.36% nodes  
 FLx2|88.67% nodes  
 Louv\_baseline  
 Leiden\_baseline  
 FL\_ng|92.55% nodes  
 FL\_ngx2|98.31% nodes  
 FL\_ng\_pr|92.37% nodes  
 FL\_ng\_prx2|97.22% nodes  
 PageRank|87.86% nodes  
 PageRankx2|93.49% nodes

FL|81.5% nodes  
 FLx2|86.72% nodes  
 Louv\_baseline  
 Leiden\_baseline  
 FL\_ng|88.49% nodes  
 FL\_ngx2|94.69% nodes  
 FL\_ng\_pr|90.75% nodes  
 FL\_ng\_prx2|96.34% nodes  
 PageRank|86.29% nodes  
 PageRankx2|91.91% nodes

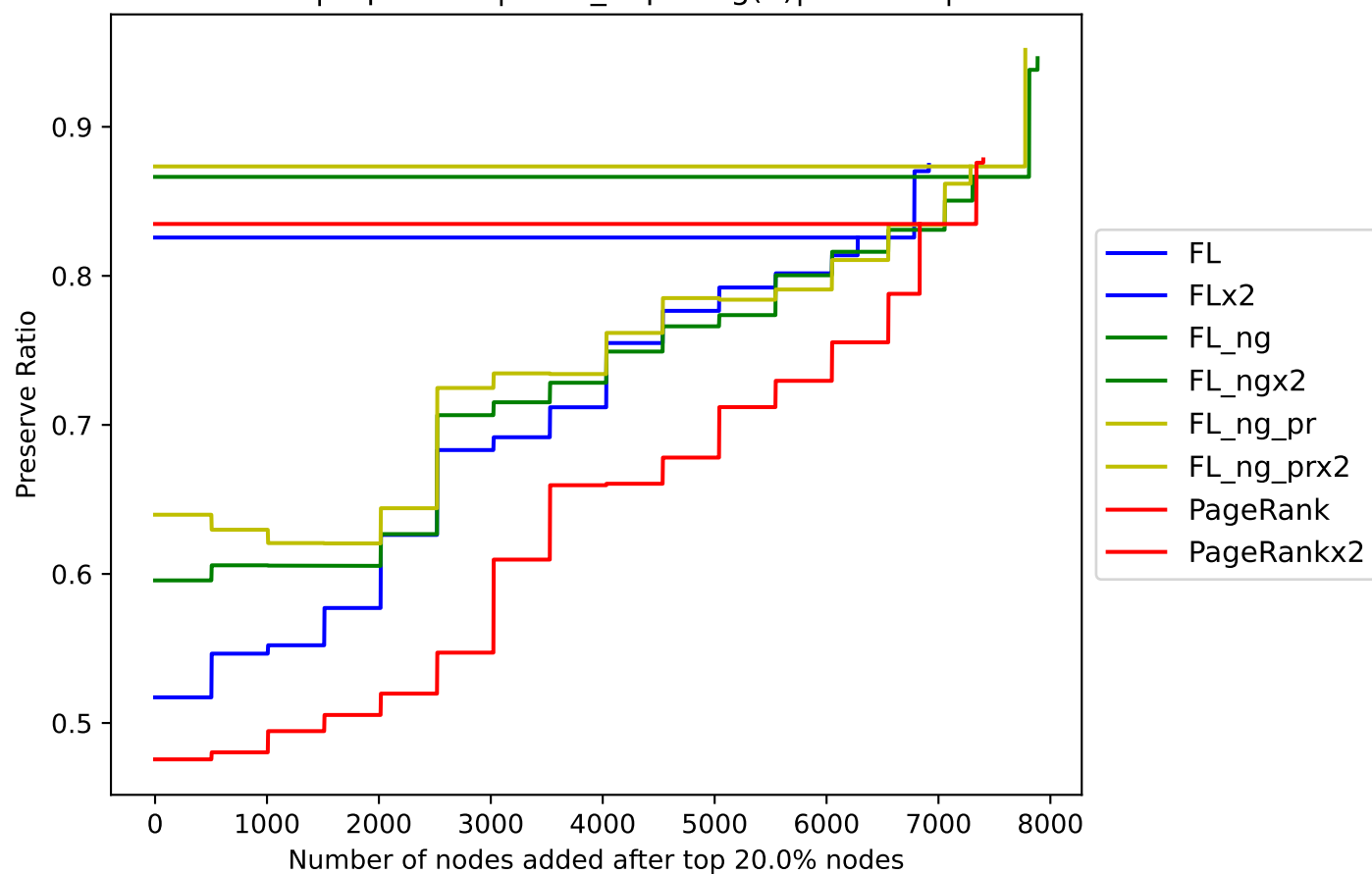
FL|79.46% nodes  
 FLx2|85.51% nodes  
 Louv\_baseline  
 Leiden\_baseline  
 FL\_ng|86.99% nodes  
 FL\_ngx2|94.1% nodes  
 FL\_ng\_pr|86.94% nodes  
 FL\_ng\_prx2|93.48% nodes  
 PageRank|83.08% nodes  
 PageRankx2|89.19% nodes

FL|78.06% nodes  
 FLx2|80.45% nodes  
 Louv\_baseline  
 Leiden\_baseline  
 FL\_ng|83.09% nodes  
 FL\_ngx2|90.02% nodes  
 FL\_ng\_pr|85.18% nodes  
 FL\_ng\_prx2|91.75% nodes  
 PageRank|81.72% nodes  
 PageRankx2|83.89% nodes

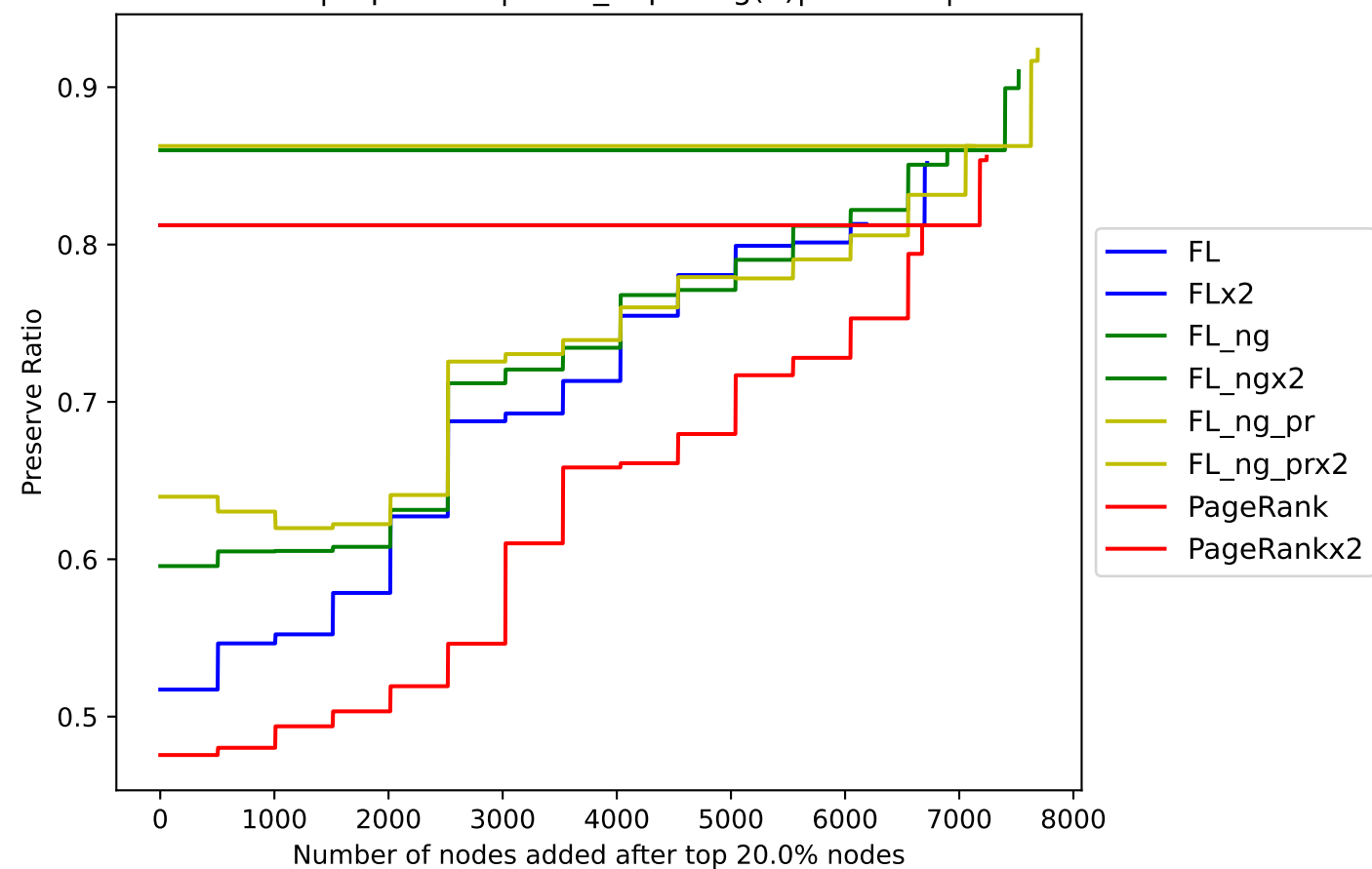
FL|70.51% nodes  
 FLx2|72.43% nodes  
 Louv\_baseline  
 Leiden\_baseline  
 FL\_ng|77.33% nodes  
 FL\_ngx2|82.36% nodes  
 FL\_ng\_pr|76.55% nodes  
 FL\_ng\_prx2|86.97% nodes  
 PageRank|79.34% nodes  
 PageRankx2|82.61% nodes

FL|63.48% nodes  
 FLx2|63.97% nodes  
 Louv\_baseline  
 Leiden\_baseline  
 FL\_ng|66.52% nodes  
 FL\_ngx2|78.42% nodes  
 FL\_ng\_pr|60.68% nodes  
 FL\_ng\_prx2|72.42% nodes  
 PageRank|65.19% nodes  
 PageRankx2|66.59% nodes

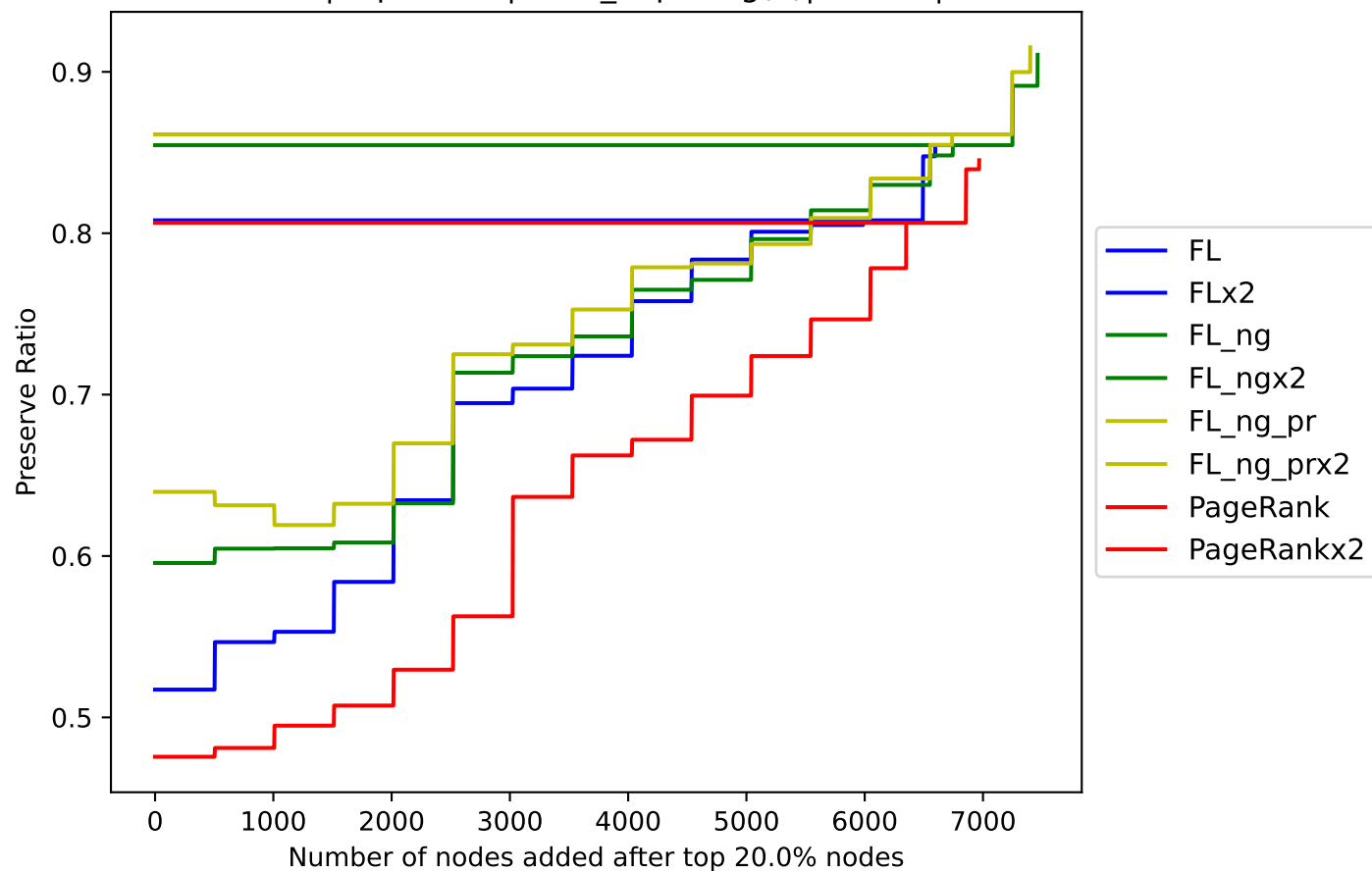
ALM | top 20.0%| Num\_hops: log(n)|res: 0.05|



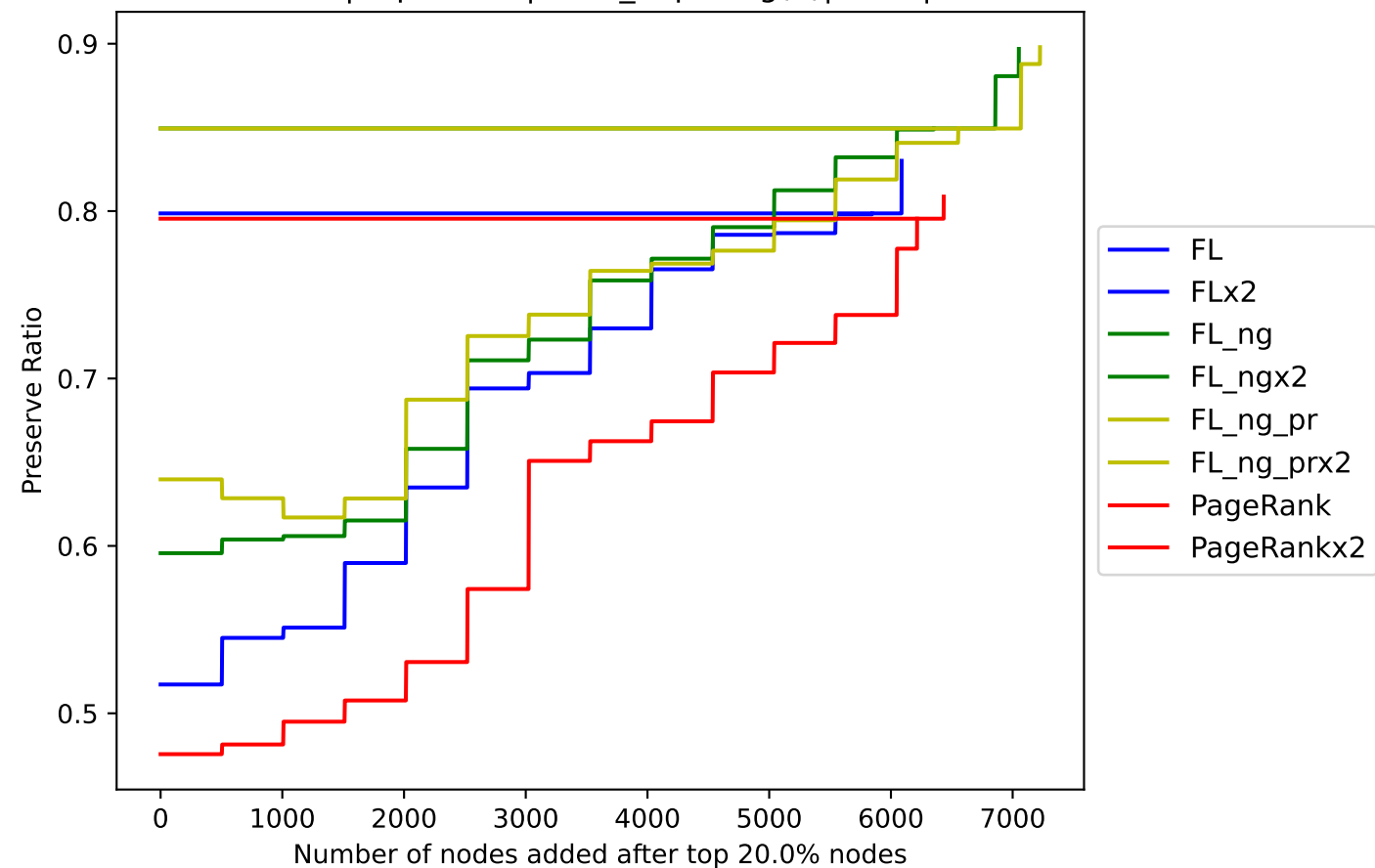
ALM | top 20.0%| Num\_hops: log(n)|res: 0.25|



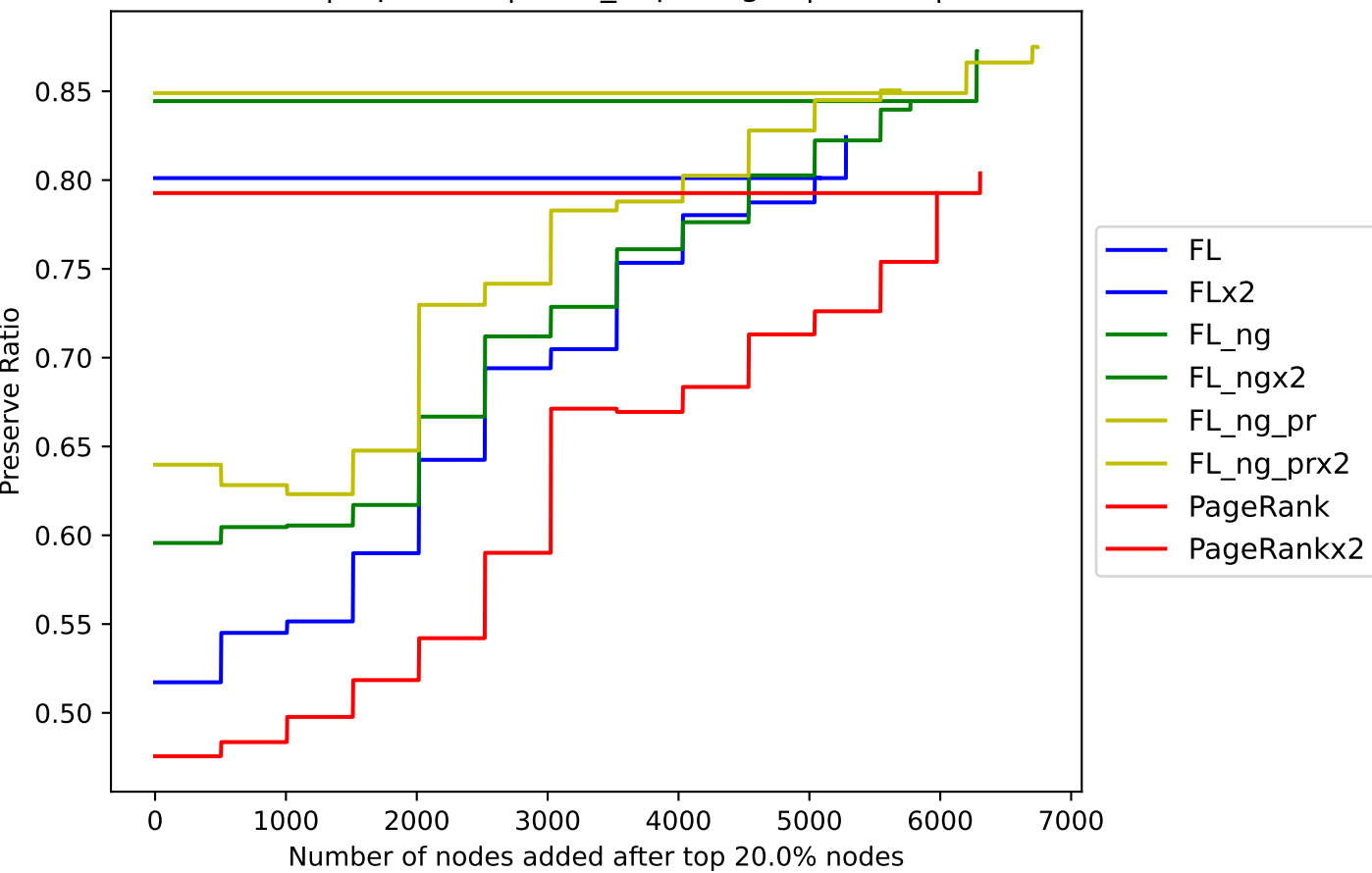
ALM | top 20.0%| Num\_hops: log(n)|res: 0.5|



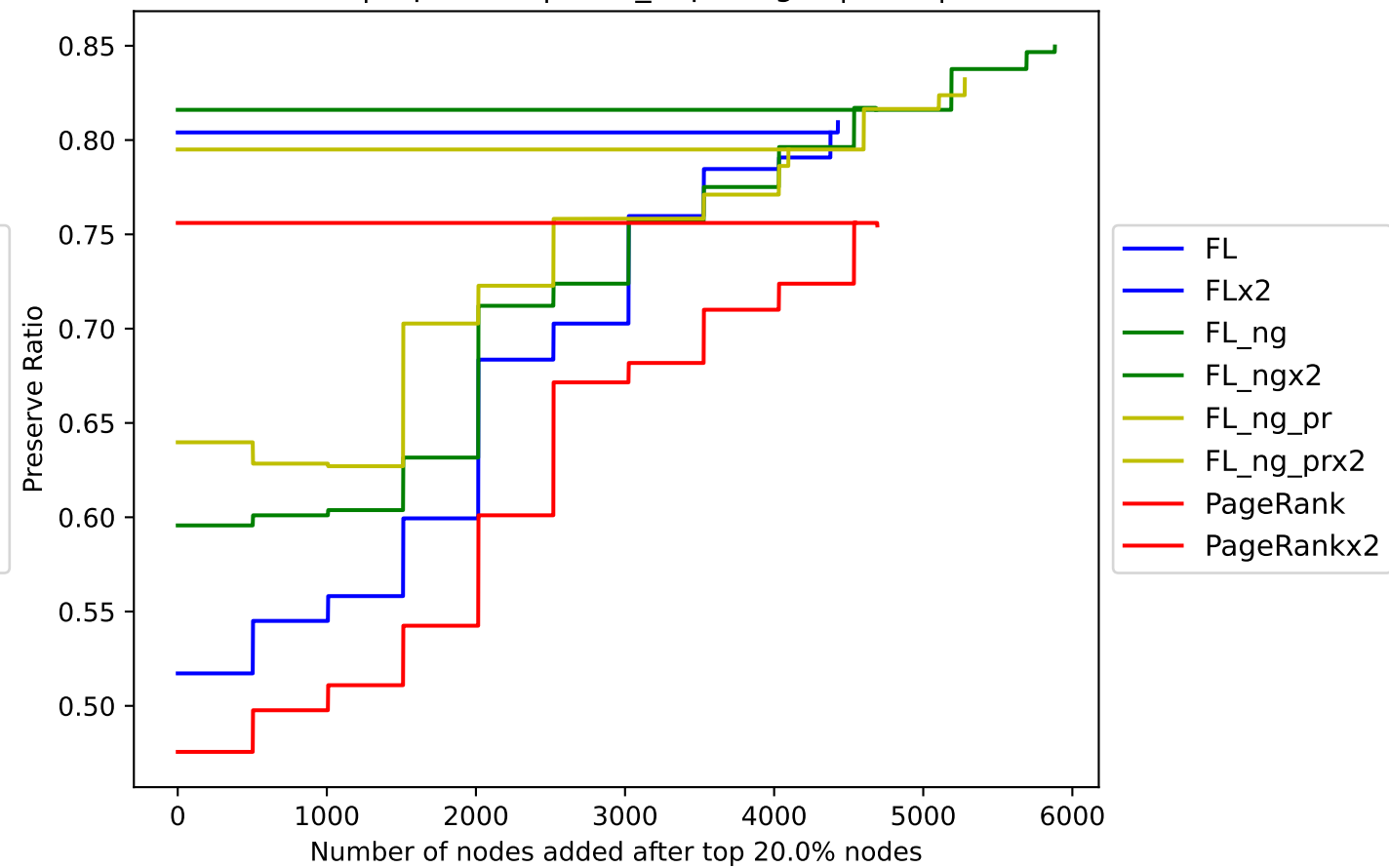
ALM | top 20.0%| Num\_hops: log(n)|res: 1|



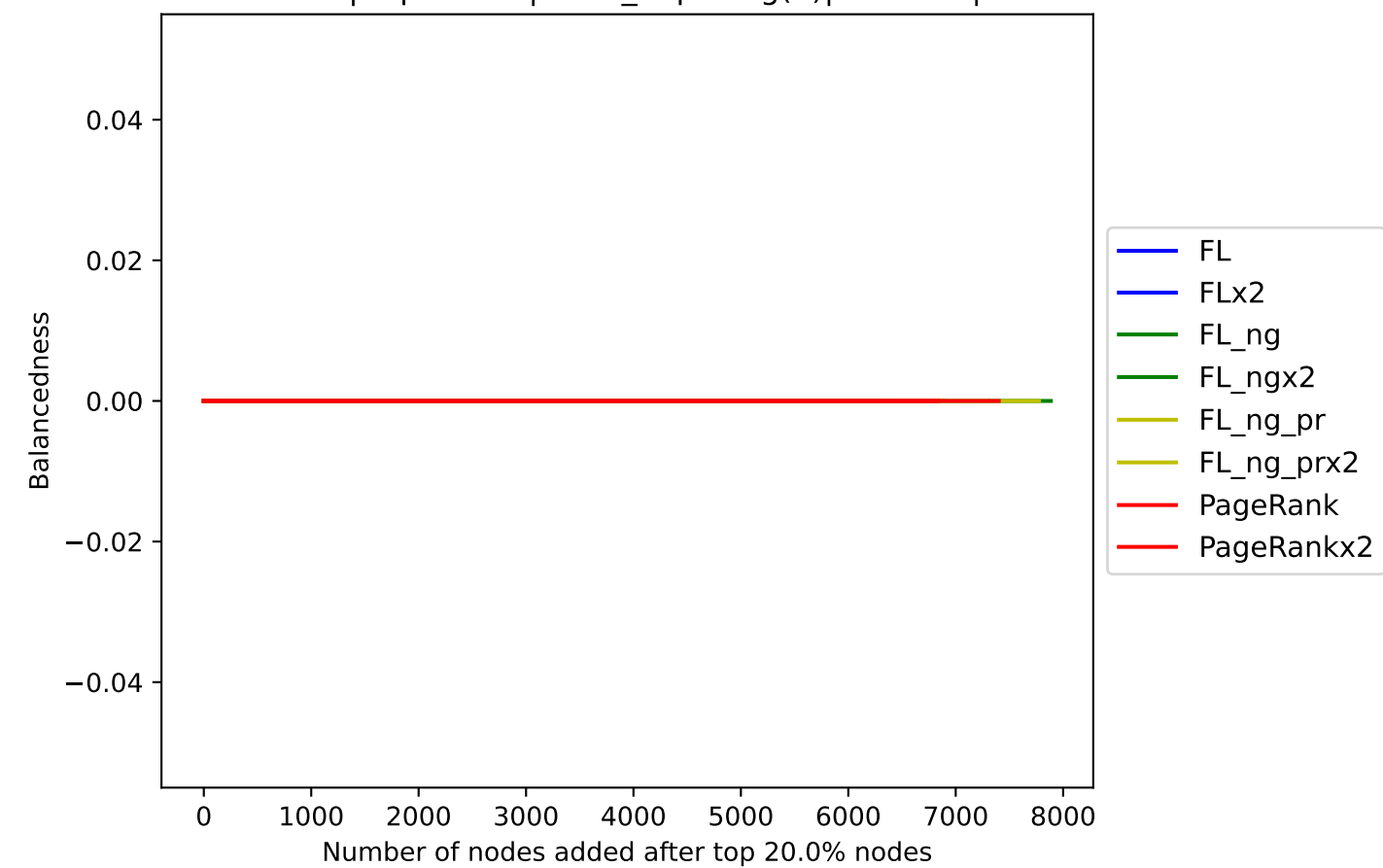
ALM | top 20.0%| Num\_hops: log(n)|res: 1.5|



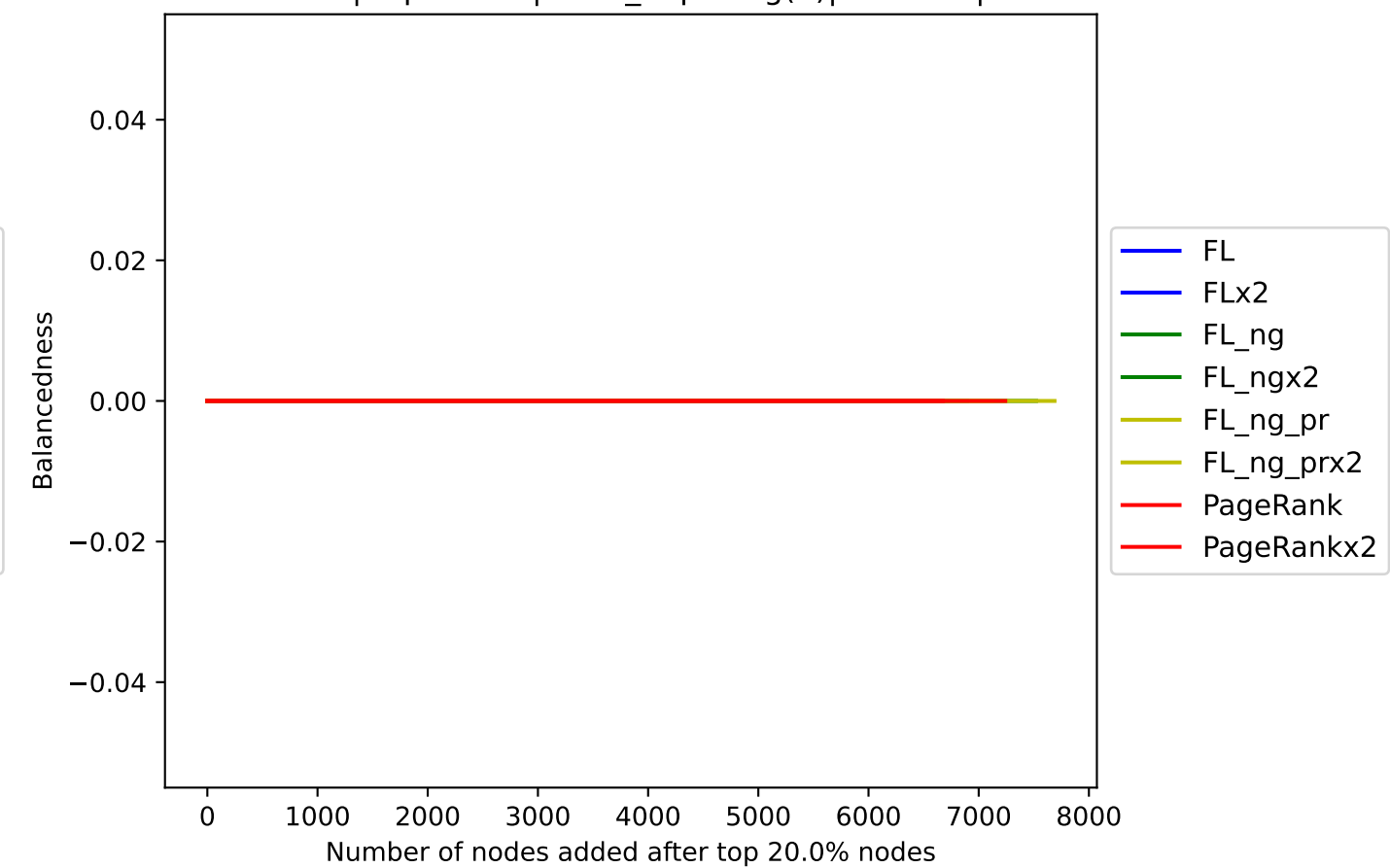
ALM | top 20.0%| Num\_hops: log(n)|res: 5|



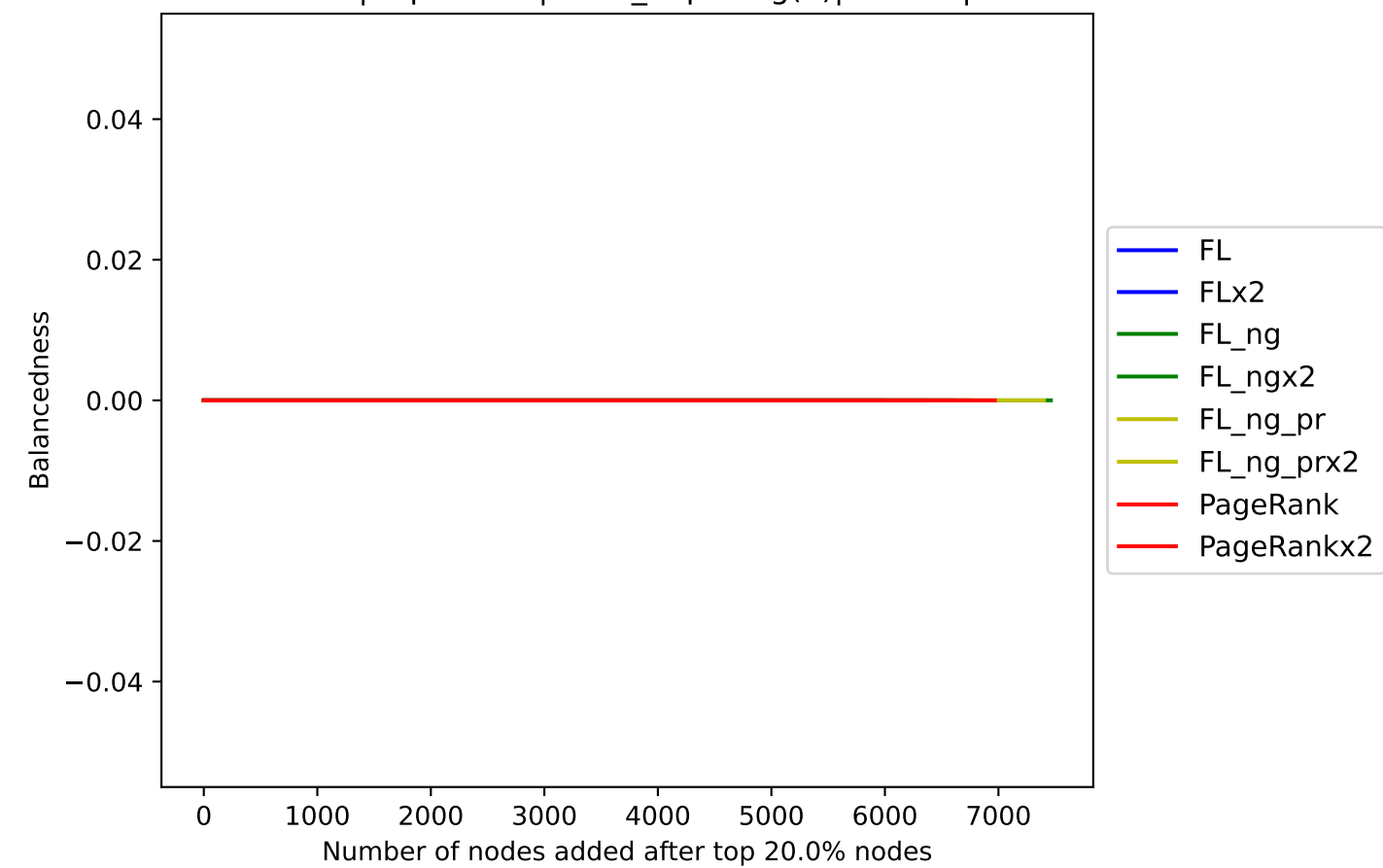
ALM | top 20.0%| Num\_hops: log(n)|res: 0.05|



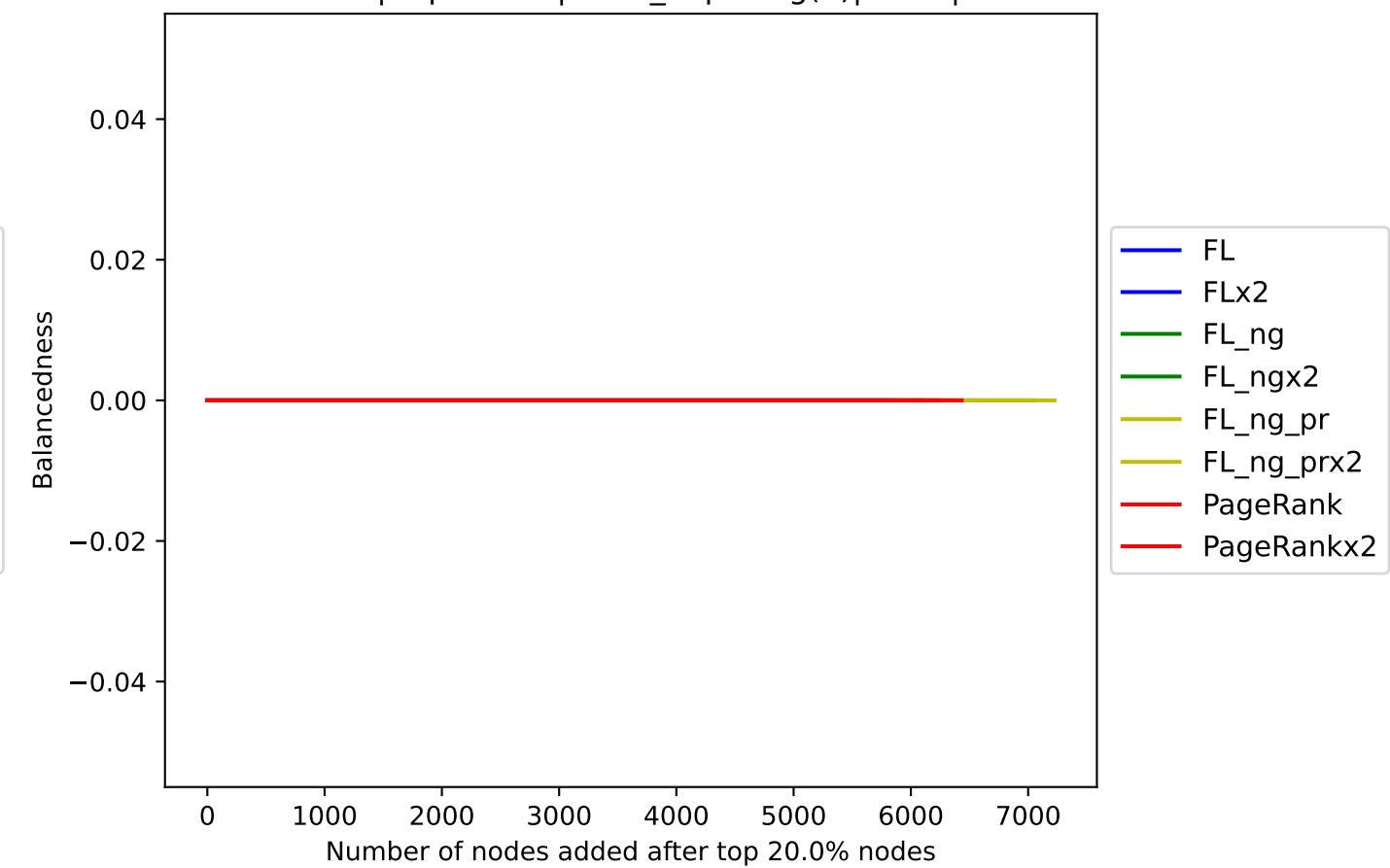
ALM | top 20.0%| Num\_hops: log(n)|res: 0.25|



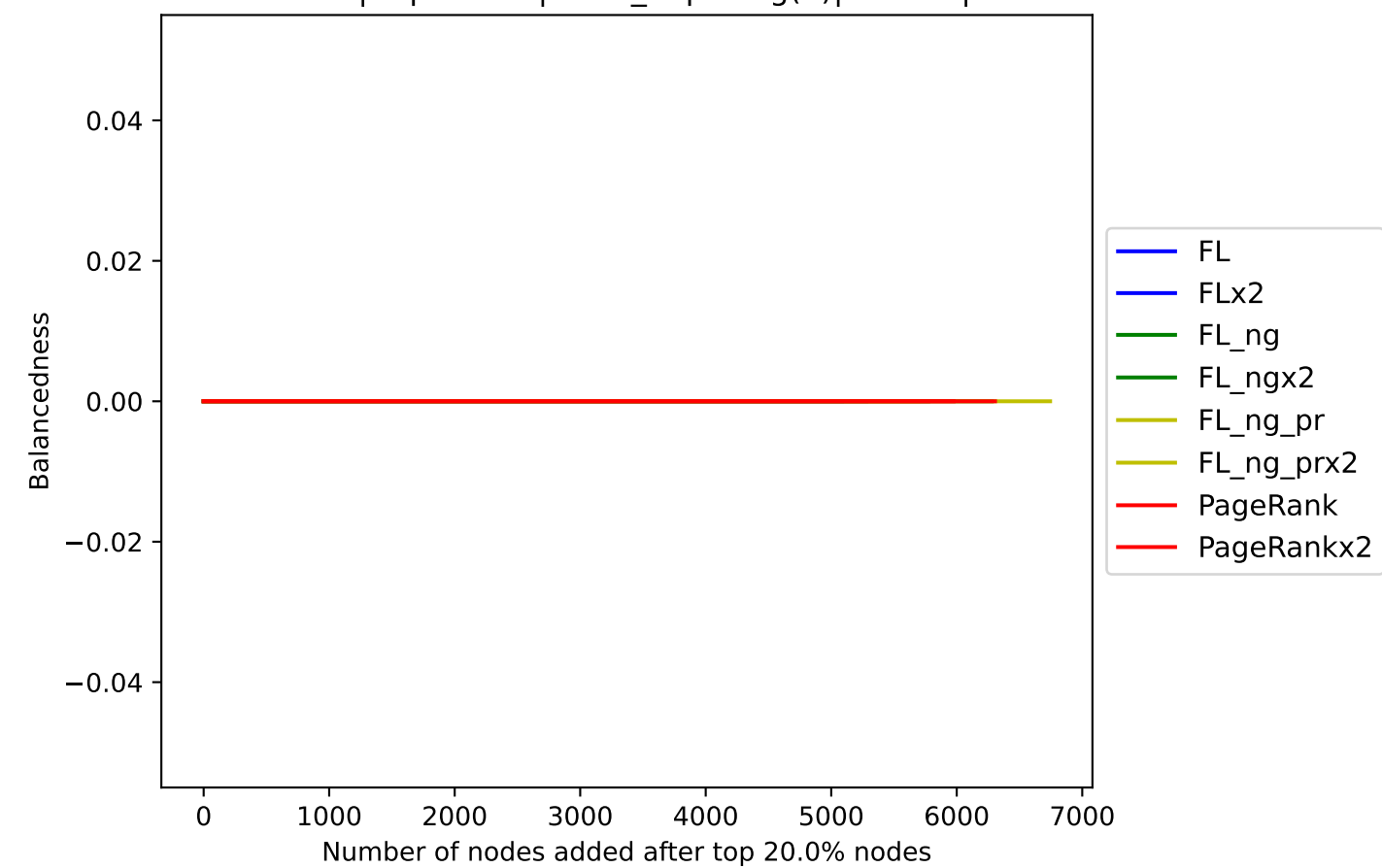
ALM | top 20.0%| Num\_hops: log(n)|res: 0.5|



ALM | top 20.0%| Num\_hops: log(n)|res: 1|



ALM | top 20.0%| Num\_hops: log(n)|res: 1.5|



ALM | top 20.0%| Num\_hops: log(n)|res: 5|

