

Node	1	1
Rows	1 Node PPN 16 Random Matrix Creation	1 Node PPN 16 Eigen Decomposition
100	0.2024	0.0607
200	0.0125	0.0324
300	0.0132	0.0673
400	0.0217	0.1189
500	0.0319	0.1841
600	0.0425	0.2584
700	0.052	0.2289
800	0.0386	0.2712
900	0.0491	0.3499
1000	0.0586	0.4454
1100	0.0735	0.6637
1200	0.0882	0.698
1300	0.0999	0.8636
1400	0.1204	1.2899
1500	0.1344	1.2385
1600	0.1532	1.5065
1700	0.1723	1.7904
1800	0.1894	2.2003
1900	0.2058	2.3642
2000	0.2335	2.8302
2100	0.2665	3.1098
2200	0.2868	3.5334
2300	0.3216	3.9294
2400	0.355	4.2701
2500	0.3914	4.4271
2600	0.4213	5.0163
2700	0.4505	5.5668
2800	0.4924	6.1969
2900	0.5146	7.3475
3000	0.5607	8.1473
3100	0.5921	9.0162
3200	0.6355	9.9769
3300	0.6655	10.4097
3400	0.7139	12.1263
3500	0.7528	13.3756
3600	0.7909	13.7557
3700	0.8377	15.9131
3800	0.9031	17.4526
3900	0.9444	18.9564
4000	1.02	19.8668
4100	1.0217	22.9435
4200	1.0981	24.237
4300	1.1471	24.9679
4400	1.2178	26.6989
4500	1.2484	29.4125

4600	1.3127	31.6289
4700	1.3532	32.3664
4800	1.4431	35.662
4900	1.4655	38.8197
5000	1.5497	41.3919

2 Nodes PPN 16 Random Matrix Creation 2 Nodes PPN 16 Eigen Decomposition

0.0908	0.0387
0.0084	0.0207
0.0066	0.0345
0.0111	0.0606
0.0162	0.0961
0.023	0.1389
0.0296	0.2035
0.0349	0.2714
0.0467	0.345
0.0582	0.4384
0.0711	0.5367
0.081	0.6444
0.0923	0.8541
0.1201	1.0069
0.1345	1.1932
0.1476	1.2949
0.1693	1.498
0.1926	1.8541
0.2009	2.0842
0.2467	2.3655
0.2629	2.7001
0.2934	3.0425
0.3175	3.201
0.3466	3.78
0.3708	4.0015
0.4046	4.4778
0.4402	4.9361
0.4765	5.4768
0.5106	6.4933
0.5477	7.1991
0.5842	7.9656
0.6279	8.712
0.6554	8.9502
0.7068	10.4635
0.7429	11.3763
0.7815	11.5713
0.8323	13.3952
0.8877	14.5524
0.9298	15.6113
0.9884	16.1125
1.0029	18.574
1.0807	19.8346
1.1258	20.1327
1.1977	21.5101
1.2321	24.2691

1.2982	25.7438
1.3343	25.8278
1.4288	28.9406
1.4479	30.7513
1.538	33.1864

3 Nodes PPN 16 Random Matrix Creation 3 Nodes PPN 16 Eigen Decomposition

0.1927	0.0377
0.0059	0.0185
0.0066	0.0353
0.0108	0.0603
0.0173	0.0956
0.0222	0.1372
0.0291	0.1997
0.0363	0.2675
0.0456	0.3448
0.0589	0.434
0.0699	0.5368
0.0788	0.6429
0.0979	0.8453
0.1278	1.0109
0.1403	1.1969
0.1517	1.2789
0.1739	1.4827
0.1813	1.8222
0.2247	2.0912
0.2189	2.34
0.2603	2.6723
0.2742	2.9962
0.3087	3.1704
0.3173	3.7145
0.3732	3.9096
0.3966	4.3745
0.4372	4.8584
0.4676	5.3636
0.5074	6.3847
0.5516	7.0382
0.5859	7.7573
0.6287	8.4933
0.6574	8.7113
0.7111	10.2895
0.7445	11.1637
0.7811	11.308
0.8345	13.1095
0.8889	14.1869
0.9343	15.182
0.9915	15.4544
1	17.963
1.083	18.9365
1.1284	19.2418
1.2009	20.5324
1.2356	23.1831

1.3032	24.8345
1.3424	24.74
1.4317	28.1693
1.4479	29.8749
1.5349	31.8224

4 Nodes PPN 16 Random Matrix Creation 4 Nodes PPN 16 Eigen Decomposition

0.092	0.0478
0.0067	0.0178
0.0782	0.0384
0.0108	0.0646
0.0153	0.0987
0.021	0.1391
0.0276	0.2039
0.0358	0.271
0.0457	0.3518
0.0552	0.4446
0.0683	0.537
0.0798	0.6474
0.097	0.8532
0.1141	1.0206
0.1263	1.2166
0.147	1.3024
0.1631	1.5163
0.1838	1.8588
0.2106	2.1265
0.2316	2.3802
0.2568	2.6906
0.2756	3.0642
0.3089	3.261
0.3134	3.8315
0.3641	4.0538
0.4028	4.6441
0.4328	4.9744
0.4743	5.5291
0.5172	6.5251
0.5521	7.229
0.5896	7.9832
0.6274	8.7185
0.6618	8.9614
0.7068	10.4924
0.7465	11.4599
0.7794	11.6595
0.8365	13.4949
0.8895	14.6549
0.9376	15.7482
0.9962	16.0886
1.0155	18.4923
1.0824	19.717
1.1359	19.9964
1.1997	21.3095
1.2435	24.149

1.3026
1.3487
1.4325
1.4612
1.5384

25.8908
26.0293
29.0885
30.9242
33.1349

8	8
8 Nodes PPN 16 Random Matrix Creation	8 Nodes PPN 16 Eigen Decomposition
0.2195	0.0276
0.0164	0.0172
0.0062	0.0347
0.0106	0.0638
0.0151	0.097
0.0211	0.1385
0.029	0.2037
0.0388	0.273
0.0512	0.3492
0.0698	0.4422
0.0729	0.5412
0.0895	0.6497
0.1078	0.8609
0.1358	1.0359
0.1551	1.2262
0.1877	1.3273
0.2027	1.5418
0.2278	1.8744
0.2606	2.1527
0.3105	2.4136
0.3366	2.7814
0.3484	3.1206
0.3315	3.3175
0.4386	3.8669
0.4644	4.0665
0.5043	4.5837
0.5487	5.0697
0.596	5.6567
0.6345	6.6619
0.688	7.3412
0.7223	8.1445
0.7816	8.8339
0.8236	9.0754
0.8886	10.642
0.9296	11.7319
0.9812	11.9821
1.0423	13.8375
1.1168	14.8823
1.1679	15.9288
1.2481	16.1339
1.2613	18.8763
1.3561	19.9124
1.3	20.1825
1.5108	21.5954
1.5568	24.4739

1.6347	26.0671
1.687	26.1273
1.7925	29.281
1.8263	31.687
1.9387	33.0056

16 Nodes PPN 16 Random Matrix Creation 16 Nodes PPN 16 Eigen Decomposition

0.1859	0.0423
0.0129	0.0175
0.0064	0.0354
0.0121	0.2106
0.0179	0.1027
0.3167	0.1855
0.1847	0.3271
0.3219	0.4143
0.1724	0.7893
0.6594	0.4486
0.8582	0.8856
0.3086	1.0842
1.1946	1.4374
0.135	2.4145
2.0717	1.8131
0.6222	1.9894
3.1828	1.5602
0.6419	3.5561
0.2191	2.8512
3.3547	4.4163
8.7308	7.4761
5.5918	5.0318
6.3896	5.3951
8.6479	7.9792
4.7255	10.737
4.3383	8.8429
8.0217	10.8394
7.5072	9.4445
10.4946	12.5061
11.5454	13.3633
9.8097	15.1484
11.8597	14.7709
12.3831	13.7589
15.946	16.1127
15.1977	17.4723
13.8059	17.5672
14.4195	21.3134
15.2023	21.489
14.6385	24.7943
21.9602	25.5725
11.5961	24.4905
13.5424	26.1913
18.8001	26.7977
17.0511	28.2155
1.2443	23.3823

1.2996	25.0508
1.3401	25.085
1.434	27.9942
1.4501	30.15
1.5315	32.2011