

Supplementary Table 3

In the undirected scale free network, the discrimination results of various orders of degree, with initial number of nodes n , initial node connection probability p , running times t , and the new node added to the network each time has a degree of m .

			degree	2-order degree	4-order degree
n=100, t=1900	p=0.05, m=5	std	8.2407	120.8	3.39E+04
		alpha=0.20	0.0095	0.0075	9.50E-03
		alpha=0.25	0.0165	0.0135	1.90E-02
		alpha=0.30	0.0295	0.037	5.25E-02
		alpha=0.35	0.0415	0.0755	9.30E-02
		alpha=0.40	0.055	0.1155	1.40E-01
		alpha=0.45	0.0725	0.171	2.05E-01
		alpha=0.50	0.088	0.2395	2.73E-01
		alpha=0.52	0.3855	0.2715	0.3045
		alpha=0.55	0.3945	0.313	0.3535
	p=0.1, m=8	std	12.939	305.9	2.08E+05
		alpha=0.20	0.009	0.005	7.00E-03
		alpha=0.25	0.019	0.0135	1.70E-02
		alpha=0.30	0.0305	0.034	3.85E-02
		alpha=0.35	0.0405	0.0595	6.60E-02
		alpha=0.40	0.054	0.0925	1.03E-01
		alpha=0.45	0.069	0.1435	1.56E-01
		alpha=0.50	0.081	0.209	2.27E-01
		alpha=0.52	0.2795	0.2355	0.253
		alpha=0.55	0.2945	0.2785	0.299
	p=0.15, m=10	std	1.67E+01	522.41	5.91E+05
		alpha=0.20	9.50E-03	0.0085	1.00E-02
		alpha=0.25	2.00E-02	0.0175	2.10E-02
		alpha=0.30	3.20E-02	0.035	4.00E-02
		alpha=0.35	4.55E-02	0.057	6.45E-02
		alpha=0.40	5.75E-02	0.087	9.90E-02
		alpha=0.45	7.25E-02	0.1375	1.48E-01
		alpha=0.50	8.30E-02	0.198	2.14E-01
		alpha=0.52	0.2605	0.232	2.46E-01

		alpha=0.55	0.2685	0.284	0.304
n=50, t=1950	p=0.05, m=3	std	6.0557	62.854	9.57E+03
		alpha=0.20	0.012	0.018	4.65E-02
		alpha=0.25	0.0215	0.043	9.05E-02
		alpha=0.30	0.031	0.1005	1.46E-01
		alpha=0.35	0.0435	0.1575	2.21E-01
		alpha=0.40	0.0575	0.218	2.95E-01
		alpha=0.45	0.065	0.2815	3.76E-01
		alpha=0.50	0.0835	0.355	4.53E-01
		alpha=0.52	0.4735	0.396	0.4755
		alpha=0.55	0.488	0.4425	5.14E-01
	p=0.1, m=5	std	9.2692	150.31	5.11E+04
		alpha=0.20	0.013	0.008	1.35E-02
		alpha=0.25	0.024	0.0295	4.55E-02
		alpha=0.30	0.0305	0.0665	8.10E-02
		alpha=0.35	0.04	0.1115	1.28E-01
		alpha=0.40	0.053	0.161	1.86E-01
		alpha=0.45	0.0665	0.21	2.37E-01
		alpha=0.50	0.0755	0.278	3.14E-01
		alpha=0.52	0.3715	0.31	0.3405
		alpha=0.55	0.381	0.3435	0.387
	p=0.15, m=8	std	1.35E+01	341.95	2.56E+05
		alpha=0.20	1.15E-02	0.007	9.00E-03
		alpha=0.25	2.00E-02	0.0185	2.00E-02
		alpha=0.30	3.10E-02	0.033	4.15E-02
		alpha=0.35	4.05E-02	0.06	7.10E-02
		alpha=0.40	5.65E-02	0.0935	1.10E-01
		alpha=0.45	6.65E-02	0.154	1.73E-01
		alpha=0.50	8.00E-02	0.22	2.42E-01
		alpha=0.52	0.3	0.2465	0.2685
		alpha=0.55	0.313	0.294	0.324
n=200, t=1800	p=0.05, m=5	std	8.9991	147.44	4.82E+04
		alpha=0.20	0.0105	0.0035	1.05E-02
		alpha=0.25	0.0235	0.025	3.65E-02
		alpha=0.30	0.045	0.0625	7.95E-02

		alpha=0.35	0.06	0.108	1.30E-01
		alpha=0.40	0.0695	0.15	1.80E-01
		alpha=0.45	0.0805	0.204	2.31E-01
		alpha=0.50	0.371	0.2635	2.88E-01
		alpha=0.52	0.376	0.285	0.3105
		alpha=0.55	0.38	0.3285	0.345
	p=0.1, m=10	std	16.122	501.75	5.43E+05
		alpha=0.20	0.0015	0.0005	1.00E-03
		alpha=0.25	0.0125	0.0065	1.00E-02
		alpha=0.30	0.04	0.035	4.20E-02
		alpha=0.35	0.063	0.0725	7.95E-02
		alpha=0.40	0.0785	0.106	1.11E-01
		alpha=0.45	0.0915	0.156	1.67E-01
		alpha=0.50	0.1015	0.221	2.35E-01
		alpha=0.52	0.2705	0.251	0.2665
		alpha=0.55	0.2745	0.2985	0.315
	p=0.15, m=15	std	2.36E+01	1110	2.62E+06
		alpha=0.20	5.00E-04	0	0.00E+00
		alpha=0.25	1.05E-02	0.0055	7.50E-03
		alpha=0.30	3.60E-02	0.0325	3.55E-02
		alpha=0.35	6.65E-02	0.07	7.50E-02
		alpha=0.40	8.50E-02	0.1055	1.11E-01
		alpha=0.45	9.20E-02	0.1415	1.49E-01
		alpha=0.50	9.75E-02	0.205	2.16E-01
		alpha=0.52	0.218	0.2395	0.2505
		alpha=0.55	0.318	0.2855	0.2985