

## Comparison of different sampling methods

method	uniform	d_p	d^2_p	d_d	d g_p	d^2 g_p	d g_d	d^2 g_d
1	0.57960	0.54300	0.49380	<b>0.46150</b>	0.47100	0.48280	0.55800	0.51450
2	0.49930	0.49480	<b>0.80770</b>	0.46360	0.49840	<b>0.43760</b>	0.57900	0.53980
3	0.51430	<b>0.40130</b>	<b>0.42720</b>	0.45000	0.47740	0.49730	0.63790	0.50920
4	<b>0.83330</b>	0.59360	0.59220	<b>0.45460</b>	0.47050	0.50990	0.63830	0.59530
5	0.58090	0.47150	0.61190	0.46390	0.52320	<b>0.45480</b>	0.58080	0.53280
avg.	<b>0.60148</b>	<b>0.50084</b>	<b>0.58656</b>	<b>0.45872</b>	<b>0.48810</b>	<b>0.47648</b>	<b>0.59880</b>	<b>0.53832</b>
dev.	<b>0.12057</b>	<b>0.06510</b>	<b>0.12929</b>	<b>0.00550</b>	<b>0.02027</b>	<b>0.02673</b>	<b>0.03307</b>	<b>0.03064</b>

The results are measured with the ratio between the frobenius forms of RESIDUAL matrix and ORIGINAL matrix. Settings are: n=2405, k=200, d=100, lambda=0.8, eta=0.1, theta=1, max\_iter=100, descend\_method=inverse

method	explanation
uniform	均匀采样
d_p	按度数分布随机采样
d^2_p	按度数平方分布随机采样
d_d	取度数最大
d g_p	按（度数 / 所在社群大小）分布随机采样
d^2 g_p	按（度数平方 / 所在社群大小）分布随机采样
d g_d	按（度数 / 所在社群大小）取最大
d^2 g_d	按（度数平方 / 所在社群大小）取最大