

Table S3: Comparison between the solution obtained from solving the posterior probability exactly or using the greedy method.

ρ^*	Exact Solution		Greedy Solution	
	Configuration Size	Recall Rate(%)	Configuration Size	Recall Rate(%)
0.5	2.025097 \pm 0.8759341	67.3	2.015355 \pm 0.9007232	67.8
0.55	2.581 \pm 0.9276084	70.7	2.132411 \pm 1.100085	79.5
0.6	2.420152 \pm 1.076278	79.4	2.433962 \pm 0.784	78.6
0.65	2.674721 \pm 1.225183	81.2	2.750469 \pm 1.187191	81.8
0.7	2.82397 \pm 1.203071	85.2	2.811429 \pm 1.218756	85.4
0.75	3.091085 \pm 1.416079	87.4	3.124314 \pm 1.37983	87.8
0.8	3.317526 \pm 1.598748	91.1	3.274583 \pm 1.554082	91.5
0.85	3.514395 \pm 1.633862	93.2	3.537402 \pm 1.570367	92.7
0.9	3.887064 \pm 1.934519	95.6	3.859345 \pm 1.922601	96.3
0.95	4.277992 \pm 1.968794	99.6	4.165692 \pm 1.938969	99.8