

The experiments of Figs. 3-7 used the F-measure to compare clusterings. The *Adjusted Rand index* [2], a variant of the *Rand index* [3] that excludes the effects of chance, has been proposed as a more accurate measure. However, the Adjusted Rand index is not ideal for solutions containing overlapping clusters because it does not take account of the number of clusters containing each pair of vertices. The *Omega index* [1] is an extension of the Adjusted Rand index to correctly measure solutions with overlapping clusters.

Our experiments were run again and the Omega index computed instead of the F-measure. The Omega index results of these experiments, again averaged over 10 runs, are shown below (right), alongside the original F-measure results (left). As expected, the main difference is that the values obtained vary over a wider range than the F-measure values.

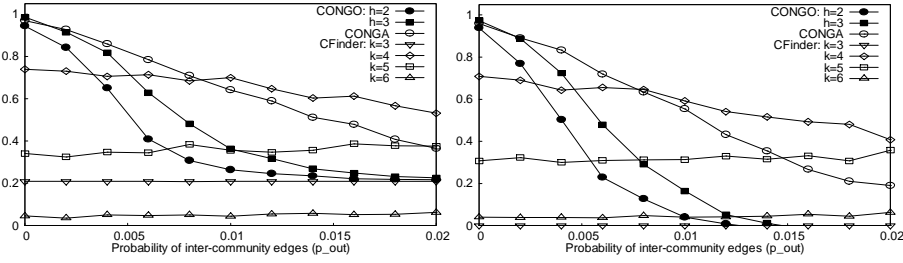


Fig. 1. F-measure/omega for random networks with $n=256$, $c=32$, $r=2$, $p_{in}=0.5$, various p_{out}

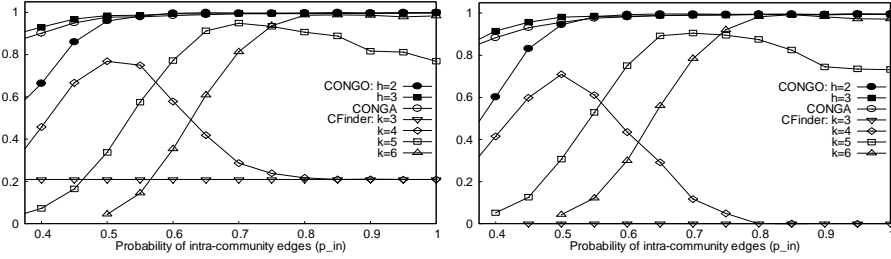


Fig. 2. F-measure/omega for random networks with $n=256$, $c=32$, $r=2$, $p_{out}=0$, various p_{in}

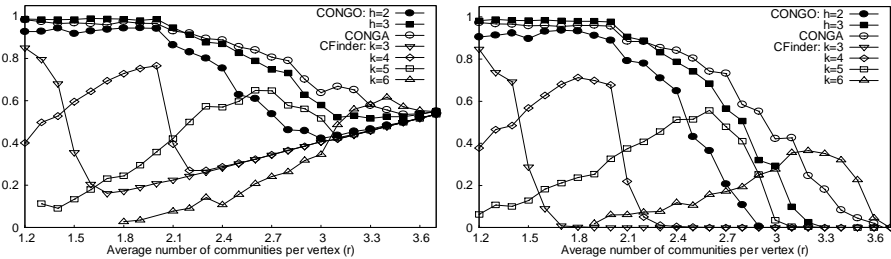


Fig. 3. F-measure/omega for random networks with $n=256$, $c=32$, $p_{in}=0.5$, $p_{out}=0$, various r

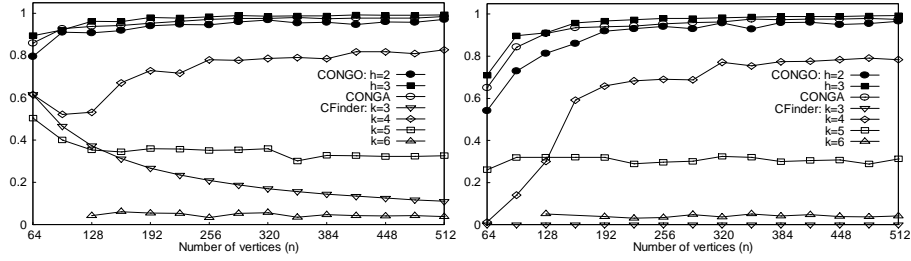


Fig. 4. F-measure/omega for random networks with $c=n/8$, $r=2$, $p_{in}=0.5$, $p_{out}=0$, various n

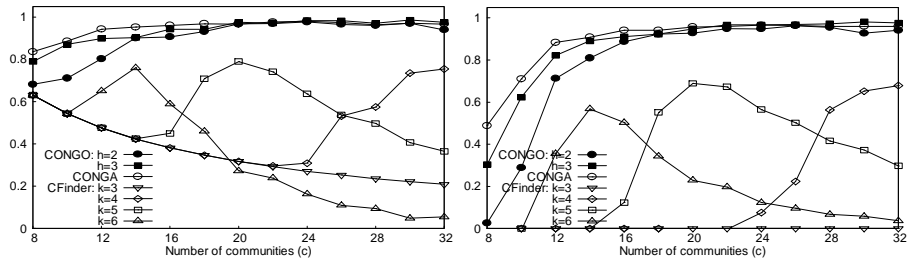


Fig. 5. F-measure/omega for random networks with $n=256$, $r=2$, $p_{in}=0.5$, $p_{out}=0$, various c

References

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2. Hubert, L., Arabie, P.: Comparing partitions. *J. Classification* 2, 193--218 (1985)
3. Rand, W.M.: Objective Criteria for the Evaluation of Clustering Methods. *J. Am. Stat. Assoc.* 66, 846--850 (1971)