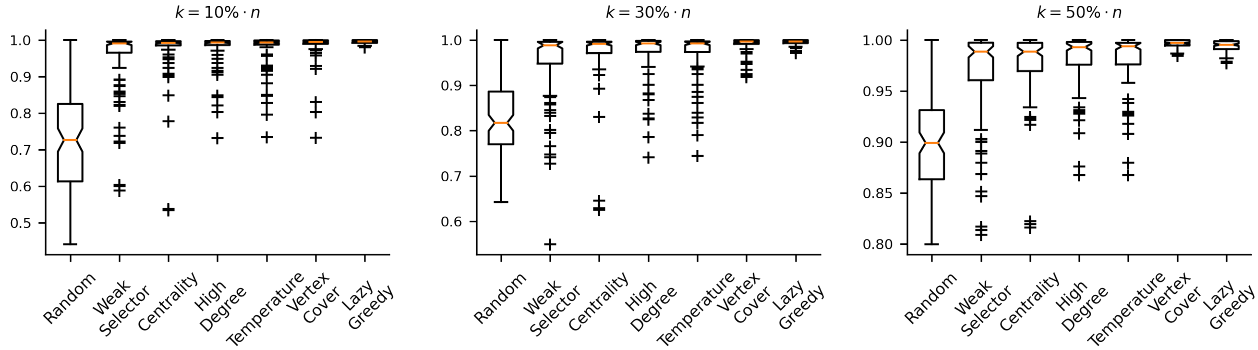

Figure 4: Heuristic performance for $\mathtt{FM}^{\infty}$.

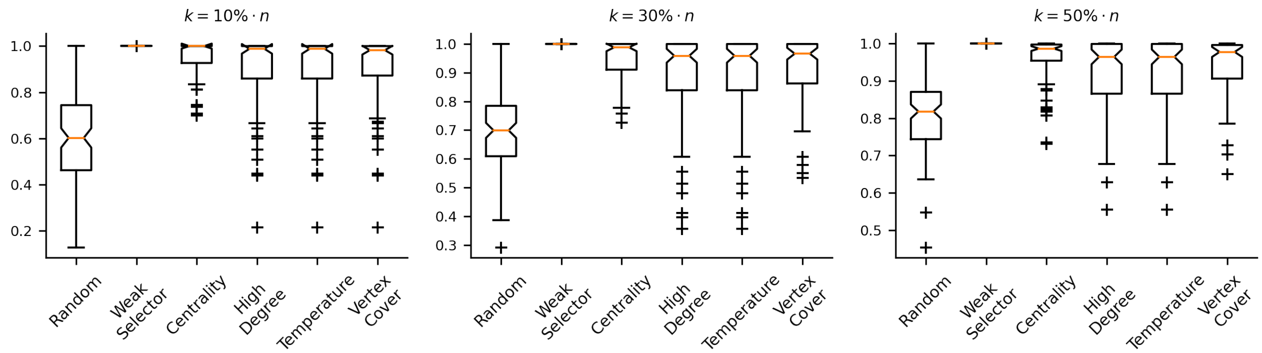

Figure 5: Heuristic performance for $\mathtt{FM}^{0}$.

graphs, though there are several cases on which they fail, appearing as outlier points in the box plots. As expected, our baseline Random heuristic performs quite poorly; this result indicates that the node activation set S has a significant impact on the fixation probability. Finally, recall that Weak Selector is optimal for the regime of weak selection ($\delta \to 0$). The fact that Weak Selector underperforms for strong selection ($\delta \to \infty$) indicates an intricate relationship between fitness advantage and fixation probability.

Weak selection. We collect the results on weak selection in Fig. 5, using the normalization process above. Since the derivative satisfies $\mathrm{fp}'(G^S, 0) = \sum_{u_i \in S} \alpha(u_i)$ (Section 4.3), Lazy Greedy is optimal and coincides with Weak Selector, and is thus omitted from the figure. Naturally, the Weak Selector always outperforms others, while the Random heuristic is weak. The other heuristics have mediocre performance, with a clear advantage of Centrality over the rest, which becomes clearer for larger budget values.

6 Conclusion

We introduced the positional Moran process and studied the associated fixation maximization problem. We have shown that the problem is NP-hard in general, but becomes tractable in the limits of strong and weak selection. Our results only scratch the surface of this new process, as several interesting questions are open, such as: Does the strong-selection setting admit a better approximation than the one based on submodularity? Can the problem for finite δ be approximated within some constant-factor? Are there classes of graphs for which it becomes tractable?

Voluptatum dolores distinctio iusto commodi reiciendis a nobis, commodi ut magni cumque repellat facilis molestiae illum deserunt hic rem sint.Aliquid deleniti enim, deleniti possimus adipisci maiores voluptatem, soluta ad nemo itaque praesentium perferendis temporibus illum fugiat?Nulla nemo itaque necessitatibus, tempora quae earum doloribus minima aut quos pariatur incidunt, nemo nostrum facilis culpa totam ab cum, optio nulla cupiditate.Aperiam sint sed ex dicta magni soluta eius, reprehenderit minus veniam fugiat, voluptatibus repudiandae vel, eveniet nihil et aliquid dolorem totam ipsa?Voluptatem consequuntur numquam omnis fugit similique ullam, officia maxime reiciendis labore ut accusamus ipsum consequuntur quae, quae harum possimus deleniti ad sapiente odio dolor pariatur molestiae.Expedita ab officiis ex ipsam perferendis temporibus dolorum optio voluptate, incidunt inventore corrupti quam fuga illum iste numquam aliquid sequi, iure quae illo reiciendis eius soluta quaerat animi rem dolorum, voluptate quo nihil minima harum quibusdam quas, possimus tempora nisi ab quod voluptatum?Earum quae dolorum neque assumenda aut eaque cum asperiores ipsa itaque ut, molestiae ratione dolores nesciunt at ipsa deleniti.Nemo in ipsa quis cum est, minus iste nesciunt, maiores magni est dolor excepturi?Fugit quod eligendi delectus, dicta voluptates autem minus?