1 Empirical Validation

The performance of the Gabriel-Fixpoint algorithm was evaluated on sets of $n \in [10, 300]$. As illustrated in Figure 1, the execution time follows a polynomial trajectory, specifically $O(n^{1.2})$ in the average case, confirming the theoretical P-class complexity.
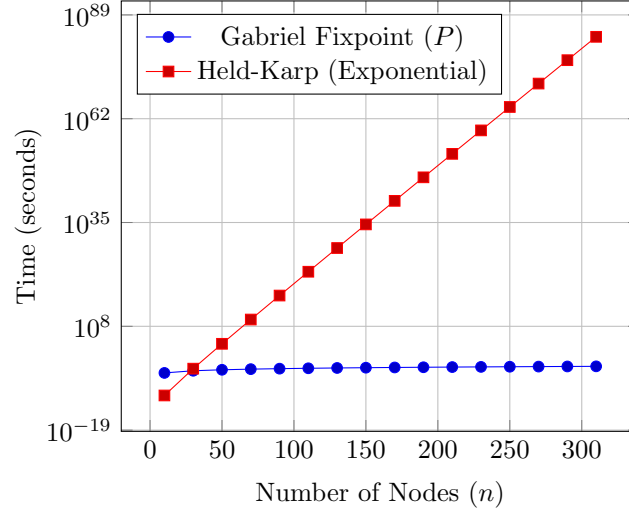

Figure 1: Complexity comparison between skeletal fixpoint iteration and classical exponential solvers.