Applied Operations Research - Plots for: Fixed Charge Network Flow

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2023-10-24

This document contains all the graphs from the main report
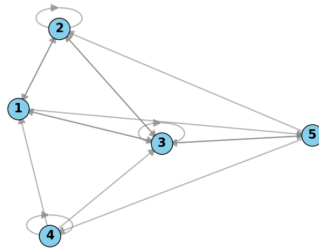
Formulation & Reducing the problem

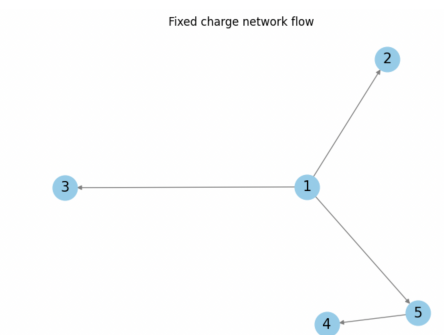Figure 1: An instance of the FCNFP where $|V| = 5$.

Figure 2: The same instance as on figure 2 where the data has been reduced.

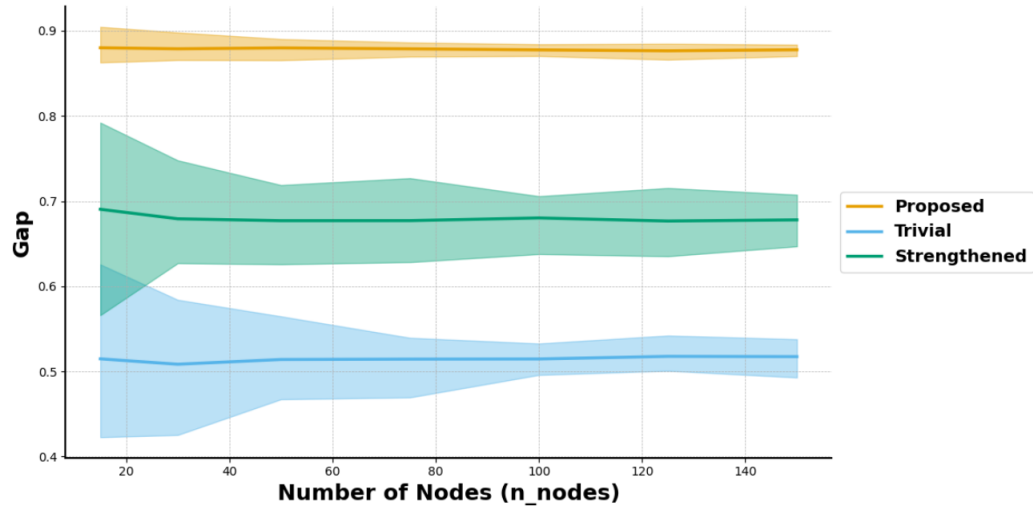# Adding constraints to the master problem

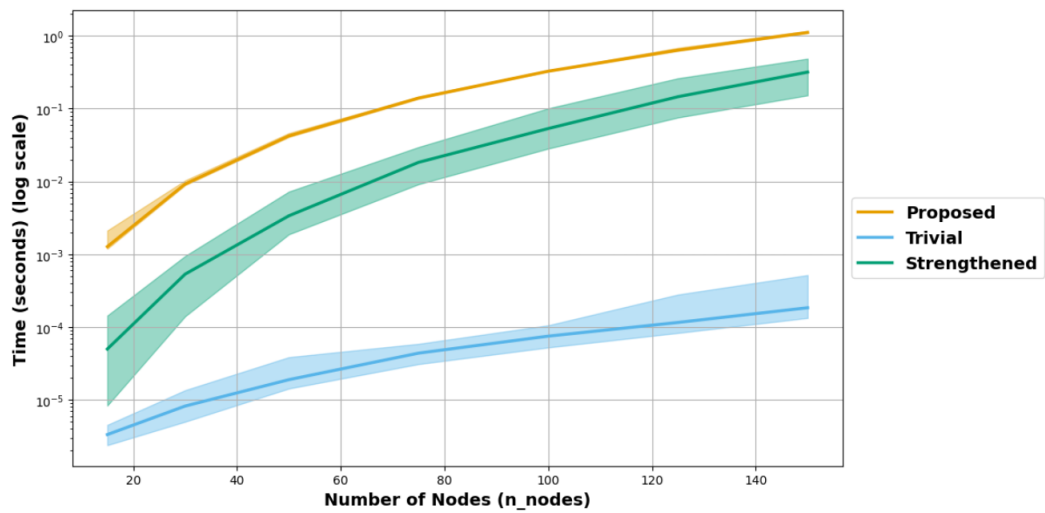Figure 3: Median-, worst-, and best proportion of lower bound to optimal objective stratified after method

Figure 4: Median-, worst-, and best computation times stratified after method
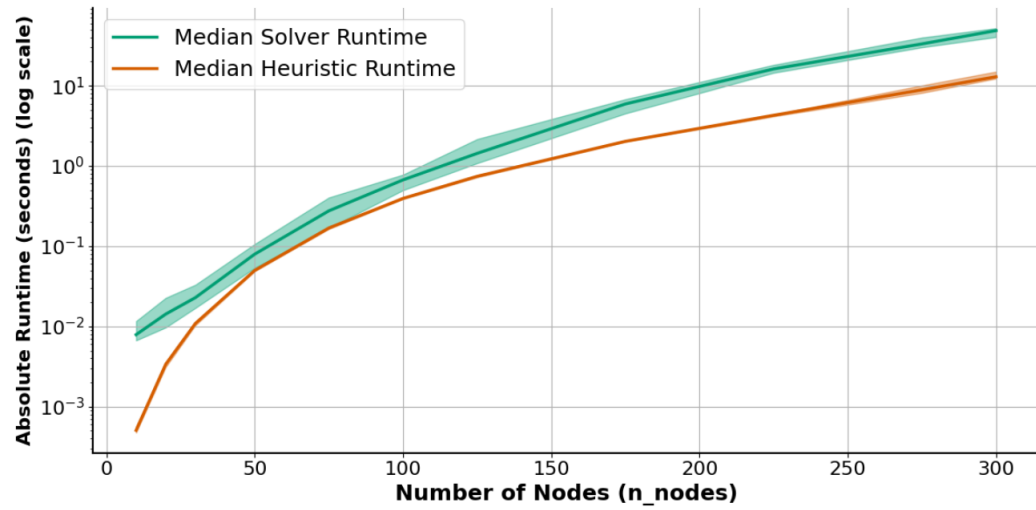
Heuristic

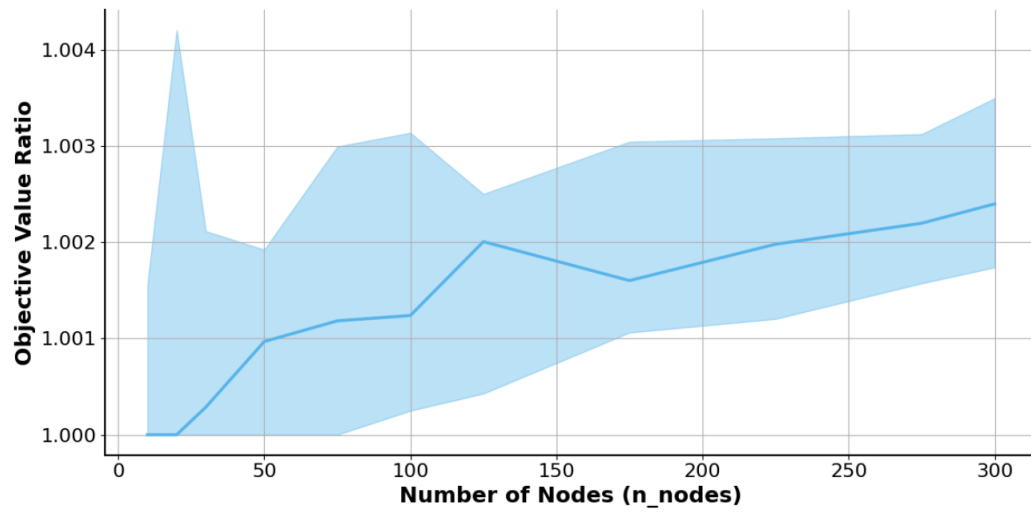Figure 5: Run-times as a function of number of nodes stratified after method.

Figure 6: Ratio between objective value from heuristic and solver
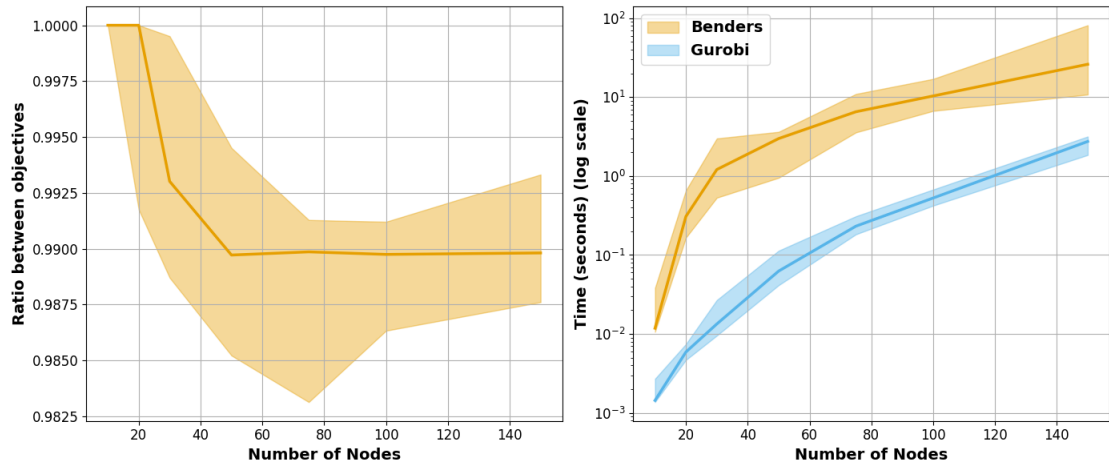
Results

Figure 7: Comparison of runtime and ratio of objective value

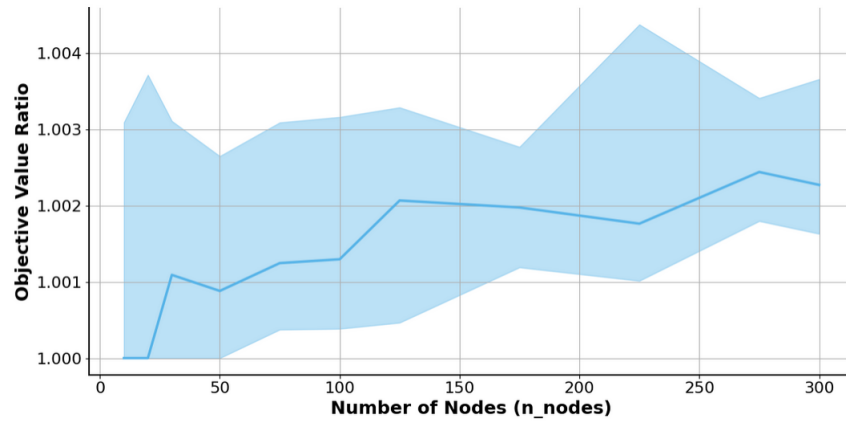# Correct comparison of heuristic and solver

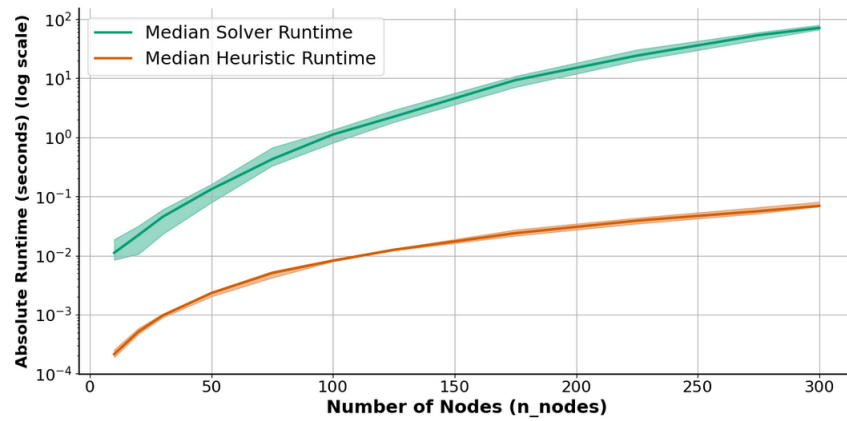Figure 8: Ratio between objective value from heuristic and solver

Figure 9: Absolute run times

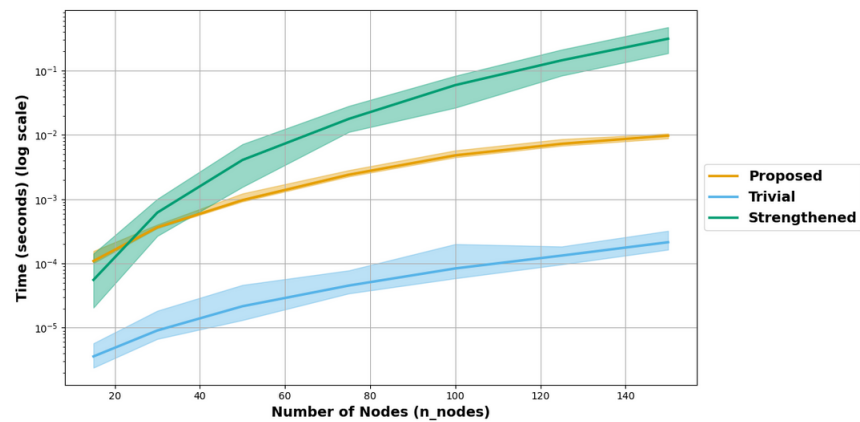# Correct run-time comparison of proposed bound on phi

Figure 10: Median-, worst-, and best computation times stratified after method