

GSEE Benchmark Standard Report

Report created on 2024-12-30-17-05

<https://github.com/isi-usc-edu/qb-gsee-benchmark>

Input data: aggregated_solver_labels.csv, last modified Mon Dec 30 16:30:37 2024

Input data: Hamiltonian_features.csv, last modified Mon Dec 30 16:29:03 2024

Latest creation time for a problem_instance.json file: Wed Dec 11 11:17:02 2024

Latest creation time for a performance_metrics.json file: Mon Dec 30 17:05:08 2024

Latest creation time for a solution.json file: Mon Dec 30 16:29:03 2024

Problem Instance Summary Statistics

number of problem_instances: 82

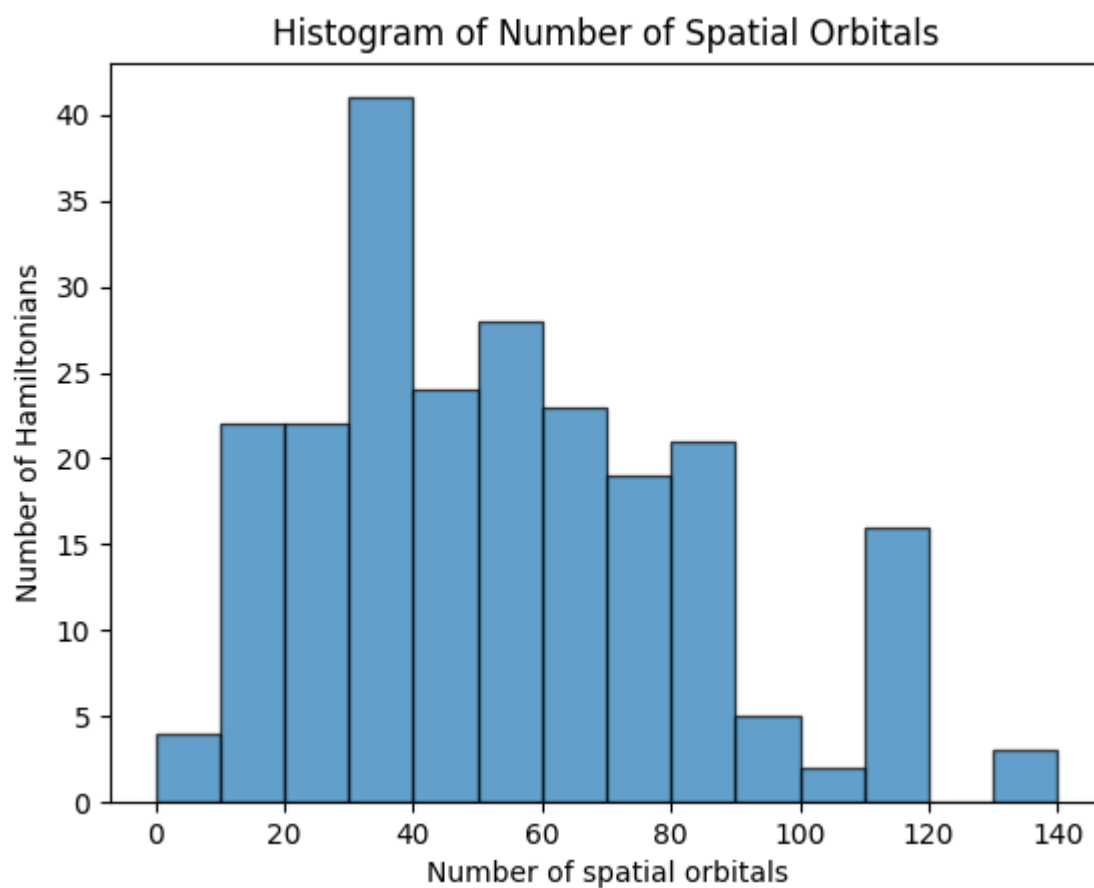
problem_instance.json with the most tasks: 16 (mo_n2_pincer/8a3787cc-d3d0-42a8-d9a9-7de2aed45208)

number of Hamiltonians (i.e., tasks): 230

minimum number of orbitals: 6

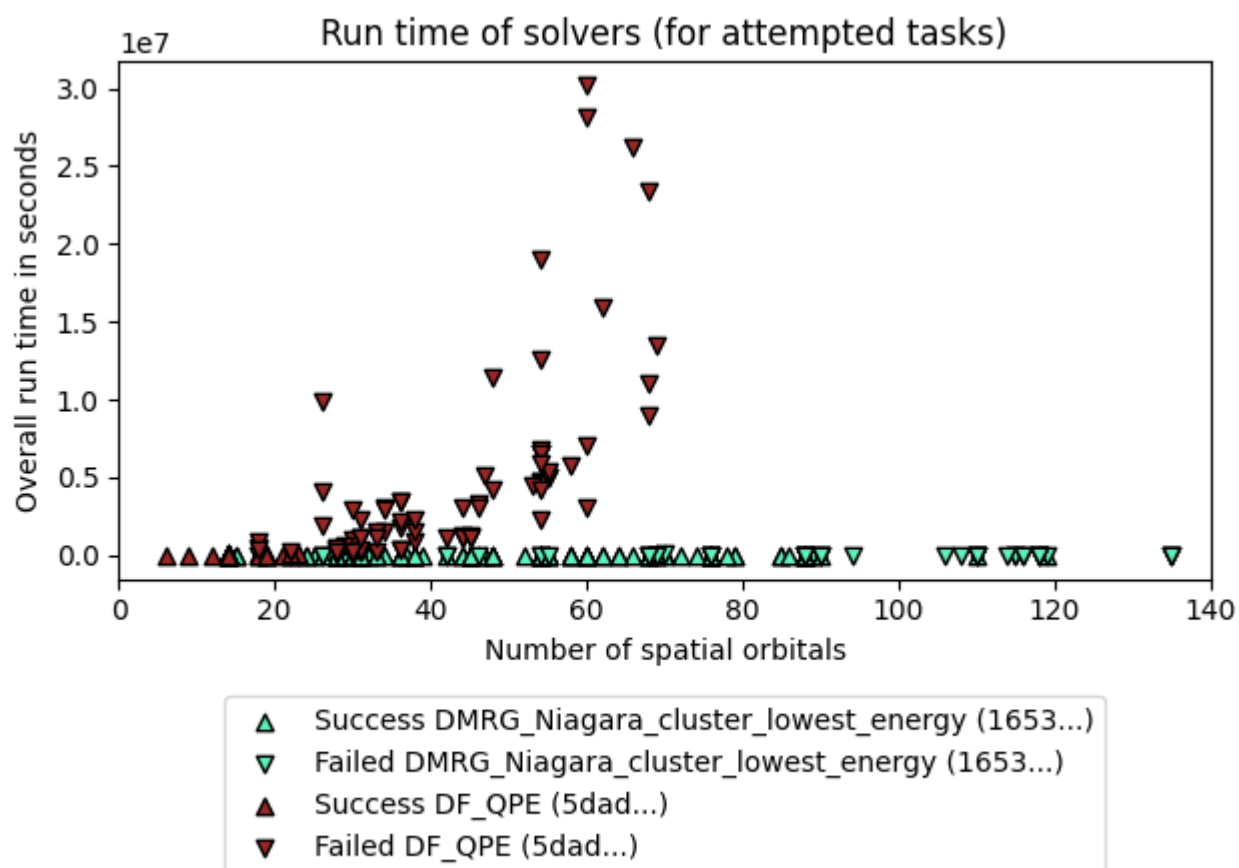
median number of orbitals: 53.5

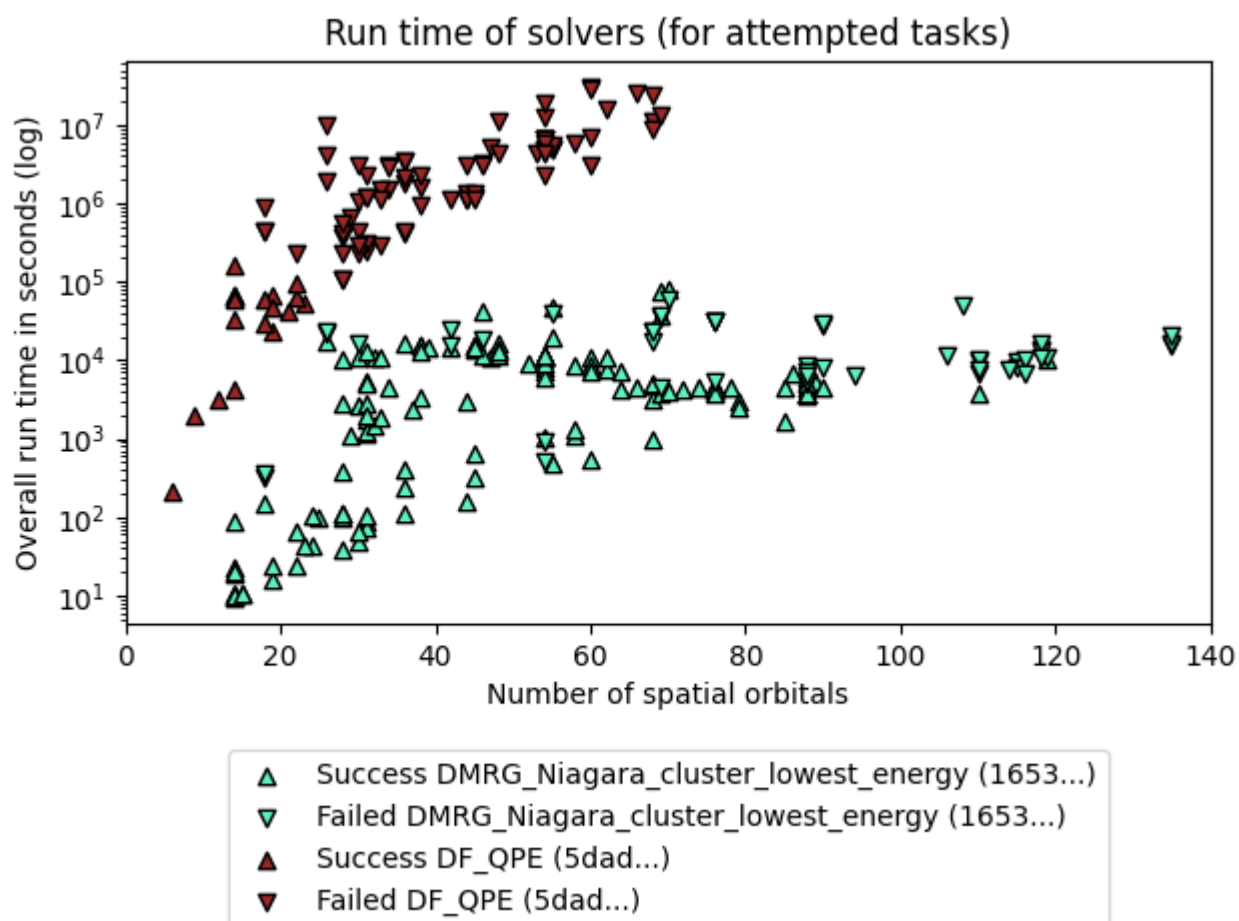
maximum number of orbitals: 135



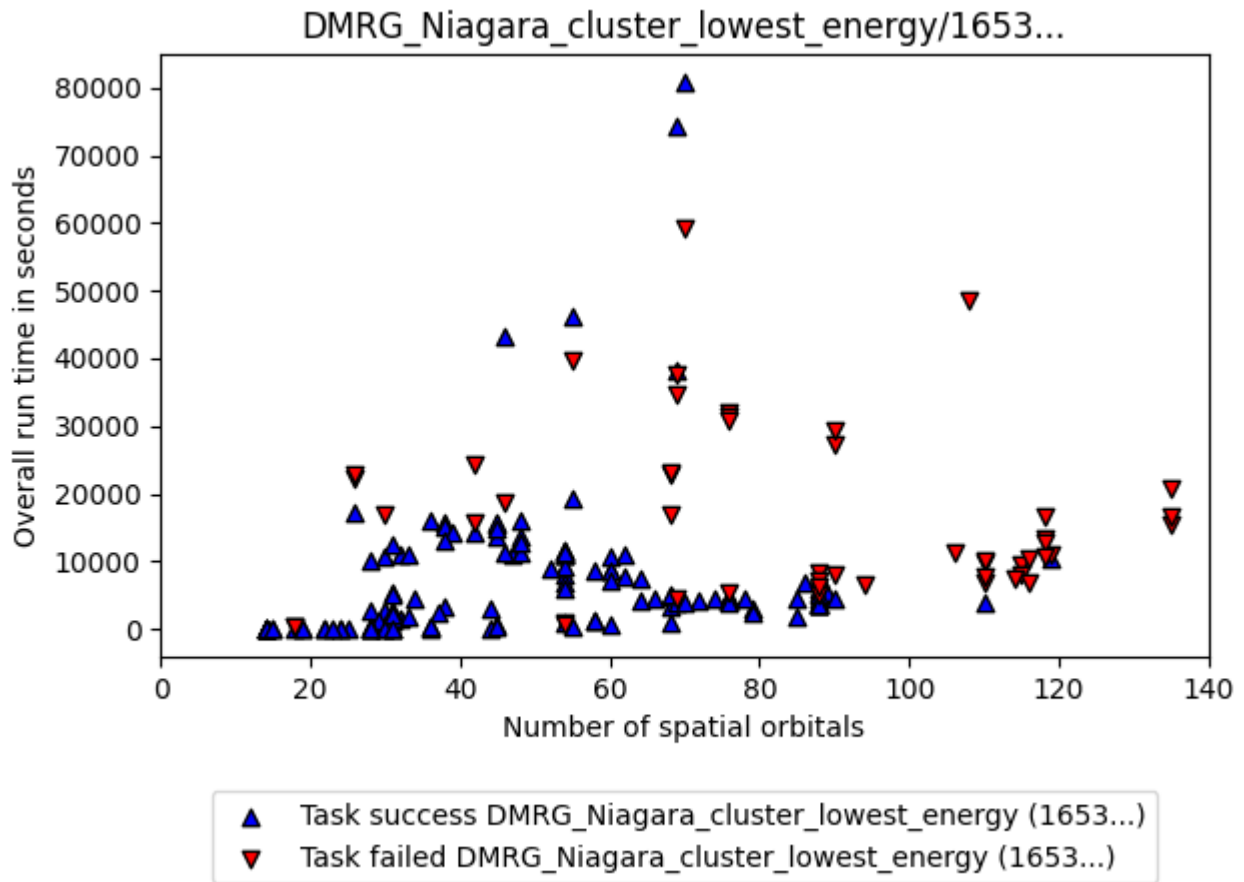
Solver Summary Statistics

number of unique participating solvers: 2





**Solver DMRG_Niagara_cluster_lowest_energy,
16537433-9f4c-4eae-a65d-787dc3b35b59**



solver_short_name: DMRG_Niagara_cluster_lowest_energy

performance_metrics_uuid: 8db26914-87ff-4ba9-b69d-6ae8c3356ce1

creation_timestamp: 2024-12-30T22:04:37.630488+00:00

number_of_problem_instances: 82

number_of_problem_instances_attempted: 76

number_of_problem_instances_solved: 43

number_of_tasks: 230

number_of_tasks_attempted: 192

number_of_tasks_solved: 142

number_of_tasks_solved_within_run_time_limit: 192

number_of_tasks_solved_within_accuracy_threshold: 142

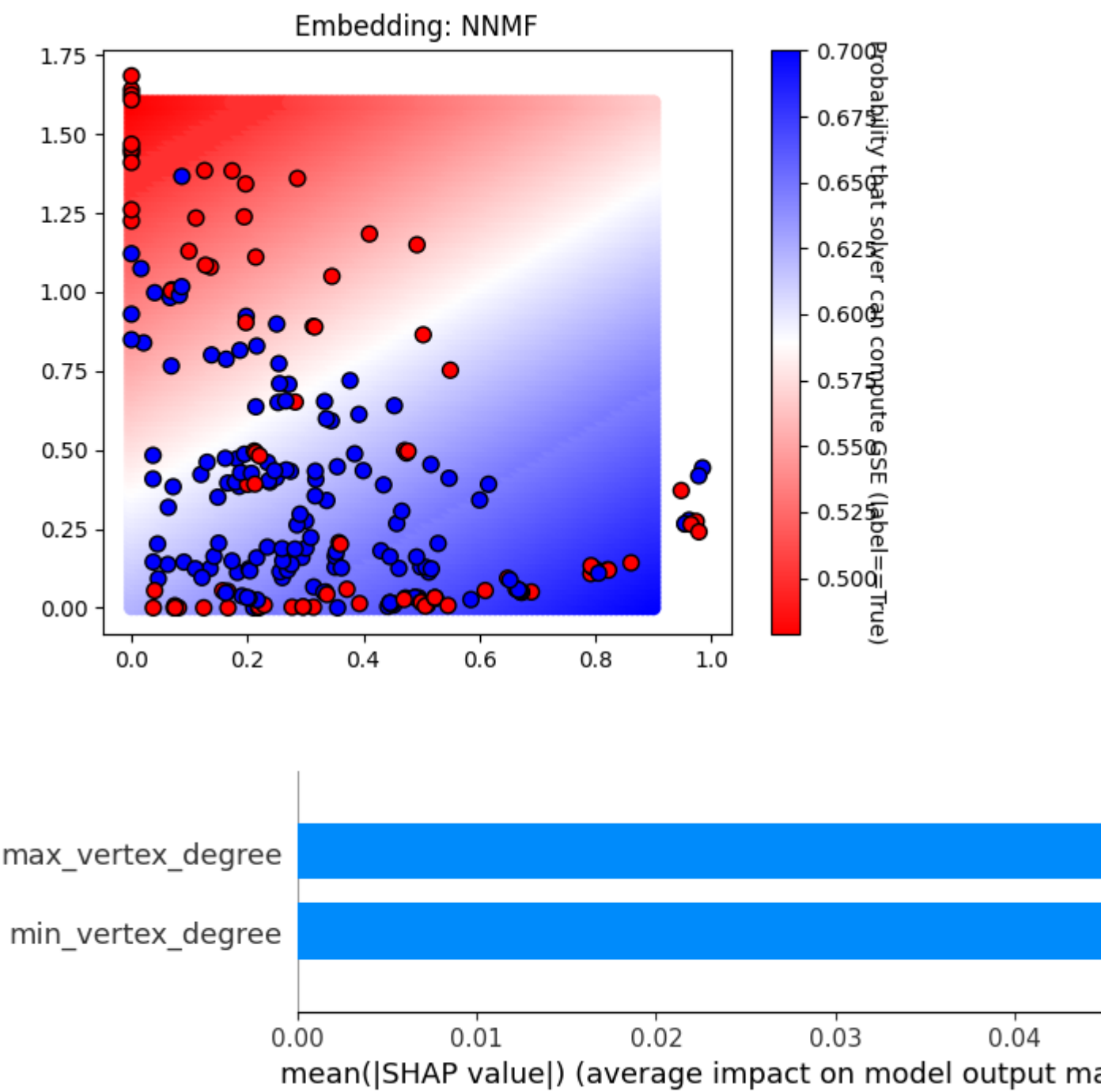
max_run_time_of_attempted_tasks: 80820.729907066

sum_of_run_time_of_attempted_tasks: 1824772.0337238186

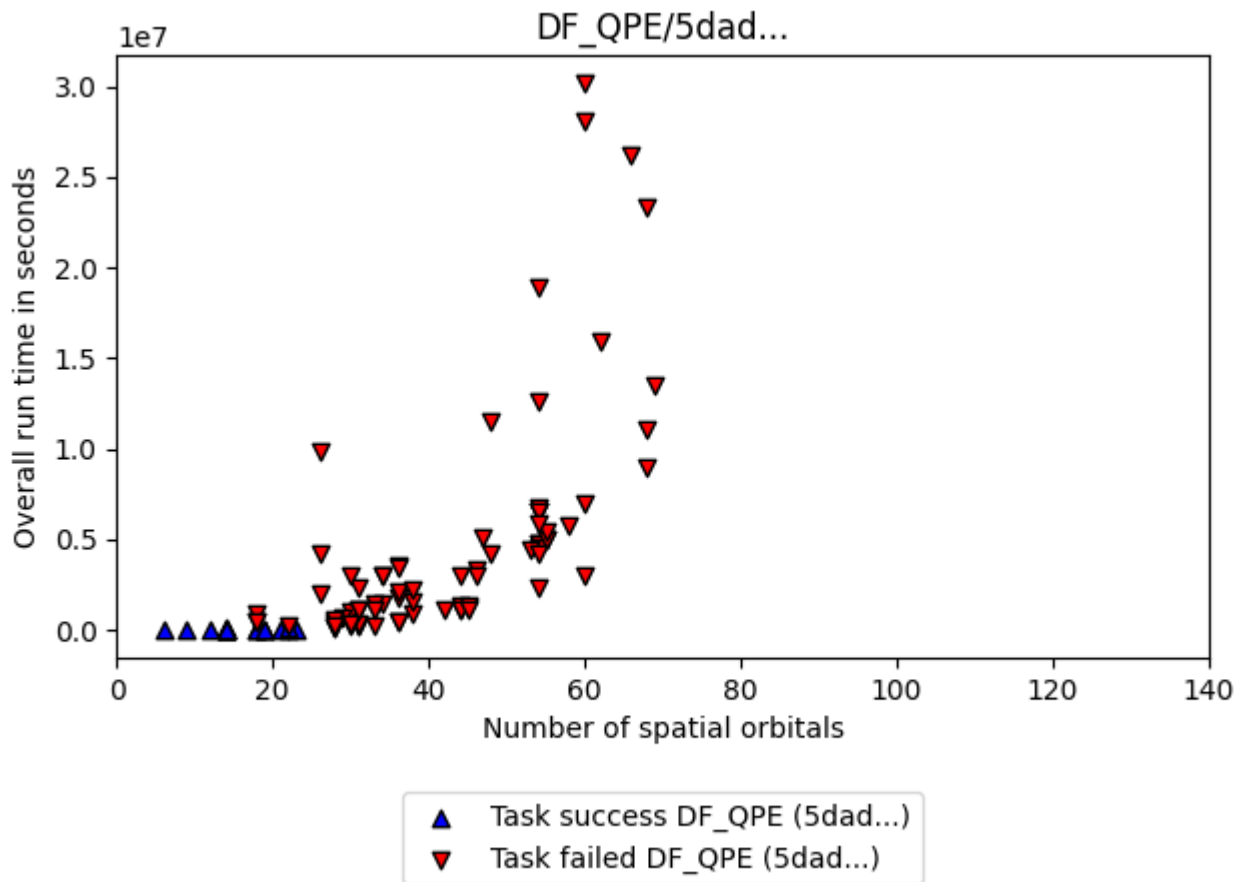
solvability_ratio: 0.0

f1_score: [0.7586206896551724, 0.8531468531468531]

ml_metrics_calculator_version: 1



Solver DF_QPE, 5dad4064-cd11-412f-85cb-d722afe3b3de



solver_short_name: DF_QPE

performance_metrics_uuid: 8c1e6625-ada5-4a59-818c-7a1d70c8ce35

creation_timestamp: 2024-12-30T22:04:38.396815+00:00

number_of_problem_instances: 82

number_of_problem_instances_attempted: 13

number_of_problem_instances_solved: 2

number_of_tasks: 230

number_of_tasks_attempted: 99

number_of_tasks_solved: 19

number_of_tasks_solved_within_run_time_limit: 19

number_of_tasks_solved_within_accuracy_threshold: 102

max_run_time_of_attempted_tasks: 30188593.464838002

sum_of_run_time_of_attempted_tasks: 374908704.304665

solvability_ratio: 0.009

f1_score: [0.997624703087886, 0.9743589743589743]

ml_metrics_calculator_version: 1

