Partially Optimal Cubic Subspace Clustering

Research Project Machine Learning

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Introduction

2 Partial Optimality for Cubic Clique Partition Problem

3 Cubic Subspace Instance Construction

Experiments and Evaluation

6 Research Results

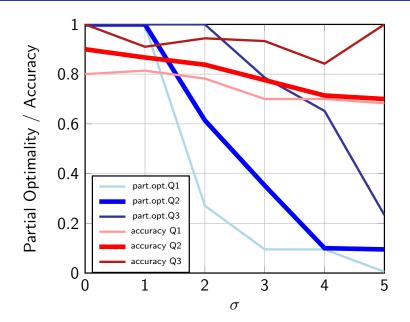
Experiments

My laptop characteristics, Random cubic subspace instances with different seeds max point component size 100 (noise are the percents then) no noise 0, small noise 1, significant noise 3, large noise 5, (Table: instance size + noise + instance count)

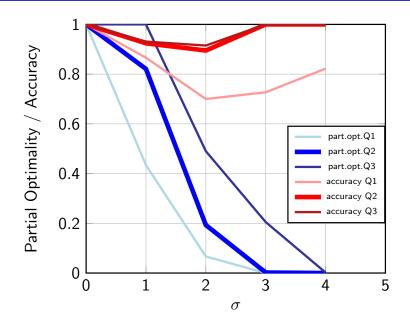
Cost Function Evaluation

blue and red dots, conflicts and and their effect (picture of the typical cost function evaluation)

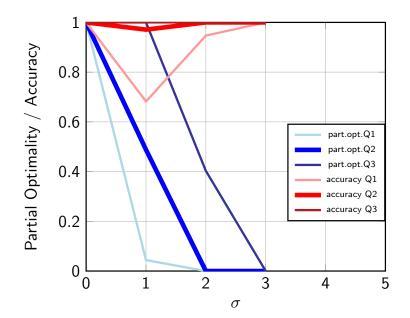
3x7 Partial Optimality / Accuracy



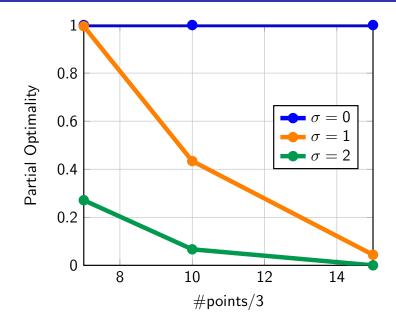
3x10 Partial Optimality / Accuracy



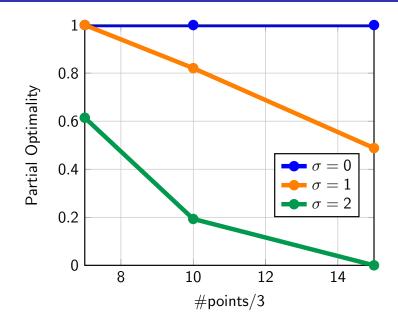
3x15 Partial Optimality / Accuracy



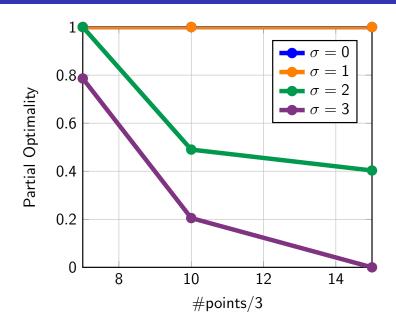
Partial Optimality (Q1)



Partial Optimality (Q2)



Partial Optimality (Q3)



Computation Time (worst case)

