

Title

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Abstract—

Index Terms—Kernel learning, Distributed Algorithms, Optimization

Fig. 1. Enter Caption....

Fig. 2. Enter Caption....

I. INTRODUCTION

DE **Notation:** † denotes pseudoinverse, $[\mathbf{M}]_q$ denotes the q th row of matrix \mathbf{M} , $[\mathbf{M}]_{:q}$ denotes the q th column of matrix \mathbf{M} , \mathbf{I}_D corresponds to an identity matrix of size $D \times D$, $\text{vec}(\mathbf{M})$ corresponds to a column vector obtained after stacking the columns of matrix \mathbf{M} moving from left to right. \otimes denotes the Kronecker product operator, $\|\cdot\|_F$ indicates the Frobenius norm. $\text{diag}(\mathbf{v})$ indicates a diagonal matrix whose diagonal entries are the elements of vector \mathbf{v} , and $\mathbf{1}_n$ corresponds to the all-ones $n \times 1$ vector and $\mathbb{E}[\cdot]$ is the expectation operator.

II. PROBLEM STATEMENT

III. ADAPTIVE FORMULATION

A. Algorithmic Details

The recursive method is tabulated as Alg. 1.

Algorithm 1 Adaptive Selection and Clustering

```

1: Initialize...
2: Step...
3: for  $\tau = 0, 1, 2, \dots$  do
4:   Do...
5:   Set...
6:   for  $\kappa = 0, 1, 2, \dots, K - 1$  do
7:     Do...
8:     if Condition then
9:       Break.
10:    end if
11:  end for
12:  Set ...
13:  if  $(|w^{\tau+1} - w^\tau| < \epsilon_2)$  then
14:    Break.
15:  end if
16: end for

```

IV. CONVERGENCE

Proposition 1

Theorem 1

V. NUMERICAL TESTS

A. Synthetic Data

B. Real Data

VI. CONCLUDING REMARKS

REFERENCES

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VII. APPENDIX

A. Proof of Theorem 1

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