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Graph Motif Problems Parameterized by Dual

1 Introduction

The Subgraph Isomorphism problem is the following pattern matching problem

where H is a disjoint union of bicliques can be easily replaced by an equivalent GM instance: For each biclique K in H

and assigns `false` to x_j. In both cases, C_i is satis ed.

vertex v is adjacent to all vertices in $Y \setminus V_0$

Now, to compute the entries of D

Proof: We describe a reduction of this special case of LGM on trees to GM on

$M(c)$ vertices and deleting no vertex of V' implies that implies that some color c of C' is assigned to more than M

De nition 3 ([4]) *Let L be a language, let R be a polynomial equivalence*

of V_D

occurrence of M in G contains all vertices removed during Phase I: these vertices are either unique or lie on the uniquely determined path between two unique

Proof: The algorithm is as follows. First, reduce the input instance in $O(n)$ time to an equivalent one with $O(\ell)$ vertices using the kernelization of Theorem 7.

References

[1] A. M. Ambalath, R. Balasundaram, C. R. H., V. Koppula, N. Misra, G. Philip, and M. S. Ramanujan. On the kernelization complexity of colorful motifs. In *Proceedings of the 5th International Symposium on*

[12] M. R. Fellows, G. Fertin, D. Hermelin, and S. Vialette. Upper and lower

[22]