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END SIMPLICIAL VERTICES IN PATH GRAPHS

MARISA GUTIERREZ

Conicet

Departamento de Matemática, Facultad de Ciencias Exactas
Universidad Nacional de La Plata, Argentina

e-mail: marisa@mate.unlp.edu.ar

AND

SILVIA B. TONDATO

Departamento de Matemática, Facultad de Ciencias Exactas
Universidad Nacional de La Plata, Argentina

e-mail: tondato@mate.unlp.edu.ar

Abstract

A graph is a path graph if there is a tree, called *UV*-model, whose vertices are the maximal cliques of the graph and for each vertex x of the graph the set of maximal cliques that contains it induces a path in the tree. A graph is an interval graph if there is a *UV*-model that is a path, called an interval model. Gimbel [3] characterized those vertices in interval graphs for which there is some interval model where the interval corresponding to those vertices is an end interval. In this work, we give a characterization of those simplicial vertices x in path graphs for which there is some *UV*-model where the maximal clique containing x is a leaf in this *UV*-model.

Keywords: chordal graphs, clique trees, path graphs.

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