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A separator theorem for chordal graphs. (English) Zbl 0551.05049
SIAM J. Algebraic Discrete Methods 5, 306-313 (1984).

A graph is called chordal if every cycle of it of length at least four has a chord. In the paper it is proved: Let G be a chordal graph with n vertices and m edges. Then G has a set of $O(\sqrt{m})$ vertices whose removal leaves no connected component with more than $n/2$ vertices. Moreover, an $O(m)$ time algorithm for finding the separating set is presented.

Reviewer: P.Horak

MSC:

05C40 Connectivity

68R10 Graph theory (including graph drawing) in computer science

Cited in **16** Documents

Keywords:

cut set; chordal graph; connected component

Full Text: DOI

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