

**Yannakakis, Mihalis; Gavril, Fanica**

**The maximum  $k$ -colorable subgraph problem for chordal graphs.** (English) Zbl 0653.68070  
Inf. Process. Lett. 24, 133-137 (1987).

Summary: We discuss the problems of finding maximum and connected maximum  $k$ -colorable subgraphs in chordal graphs. We prove that the problems are polynomially solvable when  $k$  is fixed and NP-hard when  $k$  is not fixed. As a special case, we can find in polynomial time the maximum induced tree and forest of a chordal graph.

**MSC:**

**68R10** Graph theory (including graph drawing) in computer science  
**68Q25** Analysis of algorithms and problem complexity  
**05C15** Coloring of graphs and hypergraphs

Cited in **3** Reviews  
Cited in **48** Documents

**Keywords:**

NP-complete;  $k$ -colorable; chordal graphs

**Full Text:** [DOI](#)

**References:**

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