A Recognition Algorithm for a Class of Partitionable Graphs that Satisfies the Normal Graph Conjecture

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Abstract: A graph is normal if admits a clique cover and a stable set cover so that every clique may intersect every stable set. The Normal Graph Conjecture says that every $\{C_5, C_7, C_7\}$ -free graph is normal. In this paper we prove this conjecture for the class of O-graphs and we give a recognition algorithm for O-graphs.

Keywords: Normal graphs, O-graphs, Partitionable graphs, Partite graphs, Triangulated graphs.

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