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*Excluding four-edge paths and their complements.*

Cographs and split graphs are two important subclasses of perfect graphs, both of which have nice characterizations in terms of excluding induced subgraphs. Cographs are obtained by excluding the three-edge path as an induced subgraph, while split graphs are characterized by excluding cycles of length four and five, and their complements. We consider the class of graphs which contain no induced four-edge path and no induced complement of a four-edge path. This class properly contains all cographs and all split graphs. We prove that a graph belongs to this class if and only if it can be obtained from split graphs and cycles of length five by repeated application of complementation, substitution, and “split graph unification.” Split graph unification is a generalization of substitution which involves “gluing” two graphs along a common induced split graph. In this talk, we describe this new graph operation and give a structure theorem when excluding four-edge paths and their complements. (Received August 26, 2014)