

Closure for $\{K_{1,4}, K_{1,4} + e\}$ -free graphs

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We introduce a closure concept for hamiltonicity in the class of $\{K_{1,4}, K_{1,4} + e\}$ -free graphs, extending the closure for claw-free graphs introduced by the second author. The closure of a $\{K_{1,4}, K_{1,4} + e\}$ -free graph G with minimum degree at least 6 is uniquely determined, is a line graph of a triangle-free graph, and preserves hamiltonicity or non-hamiltonicity of G . As applications, we show that many results on claw-free graphs can be directly extended to the class of $\{K_{1,4}, K_{1,4} + e\}$ -free graphs.