

Blocks of Degree Sequences of Split Graphs

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A graph is a *split graph* if its vertex set can be partitioned into a clique and an independent set and membership in the class of split graphs can be determined from degree sequences. Balanced split graphs have a unique partition into a clique and an independent set, and unbalanced split graphs have swing vertices that can move between the two. Moreover, a degree sequence of a split graph G can be partitioned into two parts called *blocks*, each of which is a partition into distinct parts of the number of edges of G . We discuss algorithmic methods for understanding different types of split graphs from the information contained in their blocks.

Keywords: degree sequences, blocks, integer partitions, balanced and unbalanced split graphs, swing vertices, clique, independent set