

Representations of Split Graphs using Ferrers Diagrams and Integer Partitions

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A graph is a split graph if its vertices can be partitioned into a clique and a stable set. Split graphs are a well-known family of perfect graphs and have many interesting properties. For instance, a graph can be recognized as a split graph from its degree sequence.

In this talk, we will discuss how the degree sequence of a split graph can be viewed as a Ferrers diagram, and how in turn the diagram can be viewed as an ordered pair of integer partitions with specified relationship. We will survey some classical results in this area and report on new research.