

Finding Balance in Ferrers Diagrams of Degree Sequences of Split Graphs

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A partition, π , of a positive integer n is a non-increasing sequence of positive integers whose sum is n . The partition lattice is the set of partitions of any positive integer, ordered by domination. Let $\pi = d_1, d_2, \dots, d_s$. The Ferrers diagram of π is an array of squares that is both left-justified and top-justified, such that there are d_j squares in the j th row for $1 \leq j \leq s$. It is well-known that split graphs can be characterized by their degree sequences. We survey results about the Ferrers diagrams of degree sequences of all graphs, split graphs, balanced and unbalanced split graphs, and make connections to the partition lattice.

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