

## Split Graphs and Amphoras in Posets

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An *amphora* in a poset is a subposet consisting of a minimum element  $m$ , an antichain  $A$  of maximal elements, and all elements between  $m$  and one or more elements of  $A$ . A graph is a *split graph* if its vertex set can be partitioned into a clique and an independent set. Membership in the class of split graphs can be determined from degree sequences. Moreover, degree sequences can be partitioned into two parts called *blocks* and the set of blocks representing the degree sequences of all split graphs with a fixed number of edges forms a poset where the relation depends on majorization. We partition this poset into amphoras where each amphora represents a natural class of split graphs.

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