

## **An Introduction to Set-sized Packing**

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For a graph  $G$ , the packing number,  $\rho(G)$ , is defined to be  $\max\{|S| : S \subseteq V(G) \text{ and } |N[v] \cap S| \leq 1 \text{ for each } v \in V(G)\}$ . Notice that for every vertex in  $V(G)$  there is a restriction on the number of vertices in the packing set  $S$  which lie within that vertex's closed neighborhood. Set-sized packing extends the notion of packing beyond restrictions for individual vertices to collections of vertices. An introduction to set-sized packing will be discussed including the history of how Pete Slater's work inspired this research by his academic children.

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