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Old and new results on broadcast domination and multipacking

A *dominating broadcast* is a function $f : V \rightarrow \{0, 1, \dots, \text{rad}(G)\}$ such that for every vertex $u \in V$ we have $d(u, x) \leq f(x)$ for some vertex x with $f(x) > 0$. The dual of broadcast domination is multipacking, which is a subset $S \subseteq V$ such that for every vertex x and each $i = 1, 2, \dots$, the ball of radius i about x contains at most i vertices of S . We will begin by discussing algorithms for minimum broadcast domination and maximum multipacking on strongly chordal graphs, and trees in particular, and then discuss further directions.