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Keri Sather-Wagstaff* (ssather@clemons.edu). *Monomial Ideals Arising from Graph Domination Problems.*

Graph domination problems are ubiquitous in graph theory. In the broadest terms, they ask how one can ‘observe’ an entire graph by designating a certain list of vertices, following a proscribed list of rules. An example of this is the vertex covering problem which happens to describe the irredundant irreducible decomposition of the edge ideal of a graph. In this talk, we will survey recent work with various collaborators on other monomial ideal constructions that arise from other graph domination problems, including one coming from electrical engineering. (Received September 19, 2021)