

When “wellness” meets zero forcing

Cheryl Grood, Swarthmore College, Ruth Haas, University of Hawaii, Manoa, Erika L.C. King, Hobart and William Smith Colleges, Bonnie Jacob*, National Technical Institute for the Deaf at Rochester Institute of Technology, and Shahla Nasserar, Rochester Institute of Technology

Well-covered graphs, investigated starting in the 1970s, are graphs in which all minimal vertex covers are minimum vertex covers. Well-dominated graphs, investigated since the 1980s, are graphs in which all minimal dominating sets are minimum dominating sets. More recently, since 2020, applying the “well” idea to zero forcing parameters has begun to be investigated. We will discuss well-forced and well-failed graphs, which are graphs in which every minimal zero forcing set is a minimum zero forcing set, and every maximal zero forcing set is a maximum zero forcing set, respectively. We’ll also discuss some recent related work.

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