Boris Brimkov* (boris.brimkov@gmail.com). Algorithms and heuristics for zero forcing.

We survey existing methods for computing the zero forcing number of a graph based on integer programming and dynamic programming. We also propose a novel method for computing $Z(G)$ based on Boolean satisfiability, and several heuristics for based on iteratively adding blue vertices which color a large part of the remaining white vertices. Computational results compare the different algorithms and heuristics on various types of graphs. (Received July 04, 2019)