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Domination reconfiguration: a mixed model

Let G be a graph. A domination reconfiguration graph of G is a graph whose vertices correspond to the dominating sets of G. Adjacencies are typically determined by using either the token addition/removal (TAR) or the token sliding (TS) rule. While the domination reconfiguration graph obtained by using only the TAR rule will never have a Hamilton cycle, we show that for some classes of graphs G, by adding a relatively small number of TS edges, the resulting domination reconfiguration graph is not only hamiltonian, but in fact pancyclic. This is joint work with Logan Pipes (MUN).