Solitaire clobber played on Hamming graphs

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Abstract

The one-player game Solitaire Clobber was introduced by Demaine et al. in [2]. In [3], a variation called SC2 is considered. Black and white stones are located on the vertices of a given graph. A move consists in picking a stone to replace an adjacent stone of the opposite color. The objective is to minimize the number of remaining stones. The game is interesting if there is at least one stone of each color. We here investigate the case of Hamming graphs. We prove that game configurations on such graphs can always be reduced to a single stone, except for hypercubes. Nevertheless, hypercubes can be reduced to two stones.

References

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