Are Cayley graphs diabolical?

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Résumé

The Angel Game, introduced by Berlekamp, Conway, and Guy, involves two players, the angel and the devil, taking turns on an infinite grid. The angel can jump to nearby vertices while the devil burns vertices to trap the angel. It was shown independently by Kloster, Máthé, and Bowditch that the angel escapes on ${Z}ˆ2$, and by Kutz, Bollobás, and Leader on ${Z}ˆ3$. In this talk, we will explore the generalization of the Angel Game to any infinite graph, particularly Cayley graphs. Our ultimate goal is understanding how this problem sheds light on conjectures about weakly aperiodic subshifts of finite type. This is joint work with Eduardo Silva.

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