Steve Butler, Paul Horn, and Eric Tressler Intersecting Domino Tilings,Fibonacci Quart. 48 (2010), no. 2, 114–120.

Abstract

In this note we consider an Erdős-Ko-Rado analog of tilings. Namely, given two tilings of a common region we say that they intersect if they have at least one tile in the same location. We show that for a domino tiling of the $2 \times n$ strip that the largest collection of tilings which pairwise intersect are counted by the Fibonacci numbers. We also solve the problem for tilings of the $3 \times (2n)$ strip using dominoes.