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Indiana, PA 15705. *Minimal free resolutions of domino ideals.*

Domino ideals are a class of squarefree monomial ideals arising from domino tilings of a rectangular tableau using 2×1 tiles, that is disjoint arrangements of 2×1 tiles placed horizontally or vertically to completely cover the area of the rectangle. Domino tilings are a well-studied classical combinatorial object, and in this talk we will show that some of these nice combinatorial results are present in the study of the minimal free resolutions of the associated domino ideals. In particular, we will show that the domino tilings are independent of the characteristic of the underlying field, and we will demonstrate a natural splitting to these ideals that provides a recursive formula for the graded Betti numbers. (Received January 25, 2019)