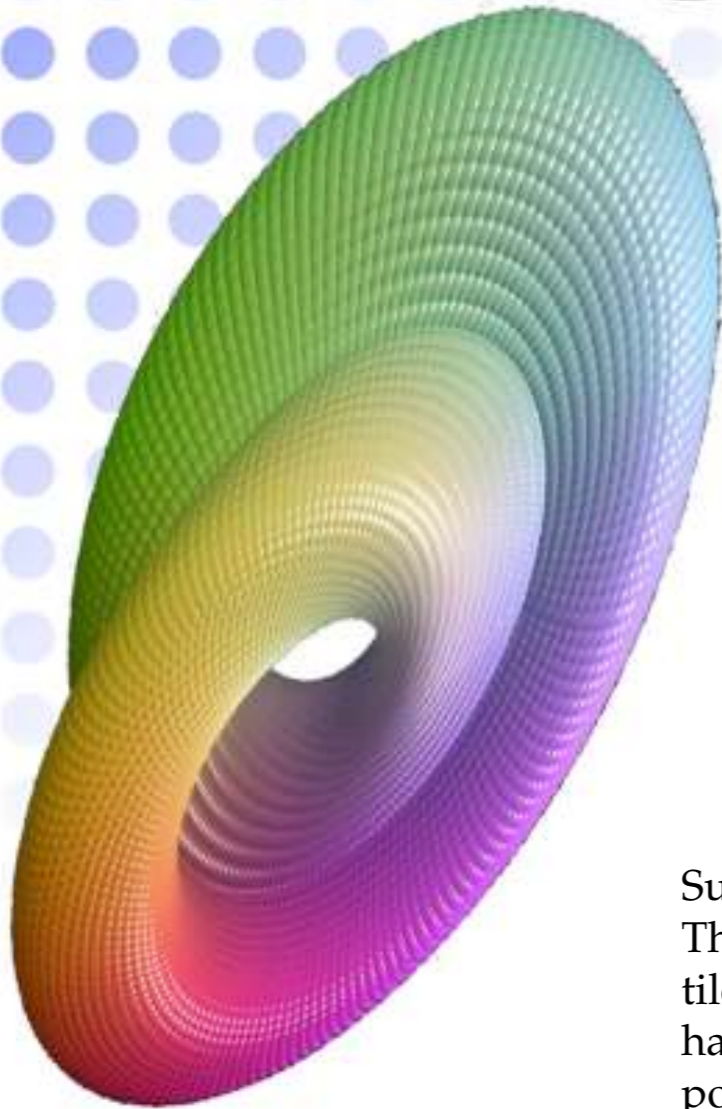


Michigan Math Club

Thursday at 4pm in the Nesbitt Room
Free Pizza and Pop



The square tile problem

Harry Richman • 15 November 2018

Suppose you want to tile your bathroom floor. The tile store in town sells only square tiles, and tiles of any size cost \$1 each. If your bathroom has dimensions 11 by 13, what is the cheapest possible cost of buying tiles to cover your floor exactly with no overlaps? (A possible tiling for a 61 by 69 floor is shown to the right.)

We will discuss an approach to this problem for a general m by n floor, which involves a shocking connection to graph theory.

