Domino tilings beyond 2D

Caroline Klivans
Brown University

Thursday, April 24, 2025
006 Kemeny Hall, 3:15 p.m.
Tea 2:45 p.m. 300 Kemeny Hall

Abstract

There is a rich history of domino tilings in two dimensions. Through a variety of techniques we can answer questions such as: how many tilings are there of a given region or what does a random tiling look like? These questions and their answers become significantly more difficult in dimension three and above. Despite this curse of dimensionality, I will discuss recent advances in the theory. I will also highlight problems that still remain open.