
ALEJANDRO ERICKSON, University of Victoria
Tatami Tilings in a Template for Teaching to Teenagers

A tatami tiling is a covering of a rectangular grid by 1×1 monominoes and 1×2 dominoes such that no four tiles meet. The local restriction imposes a global combinatorial structure that I explored with Frank Ruskey during my PhD. Tatami tilings enable high schoolers to have their own 'eureka' moment in mathematics, and prepares them to look fearlessly into an exciting and complex world of exploration and discovery that goes beyond the standard curriculum. We will visit some of our results in tatami tilings in the context of my favourite template for math outreach: 'make a mathematical discovery'.