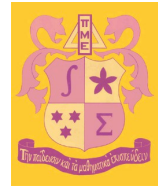


Pi Mu Epsilon

the mathematics honors society for university students



Thursday, October 24th, 2019
12:15-12:50 PM in Hume 201



Solving the 15-Puzzle

Jiranan Kerdboon and Casey Lochridge

The 15-Puzzle is a sliding puzzle where the goal is to arrange the pieces in order from 1 to 15 with the empty space in the bottom right corner. In 1891, puzzle maker Sam Loyd offered \$1000 to anyone who could solve the puzzle above with only pieces 14 and 15 switched. Nobody ever claimed the prize. We will discuss the reason that this challenge remains unsolved using modern algebra techniques and provide an algorithm to solve the puzzle given different arrangements of the pieces.

See you Thursday!