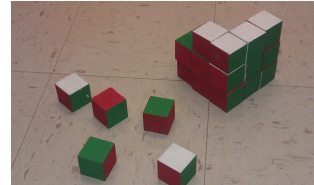**The Math/Stats Colloquium**
Department of Mathematics and Statistics
San José State University

Ethan Berkove

Lafayette College

Solving the Color Cubes Puzzle

OCTOBER 28, 2015, MH320

Abstract: Given a palette of colors, a color cube is one where each face is colored with exactly one color and all colors in the palette appear on some face. For example, there are 30 distinct 6-color cubes. In the Colored Cubes Puzzle, you are given a large set of color cubes. To solve the puzzle you need to arrange a subset of the collection into an $n \times n \times n$ cube where each face is a single color. (Think: broken Rubik's Cube.) In this talk we will describe progress on this puzzle for a number of different sized palettes. Most of the results are the result of work with undergraduates, and well give a number of still-open questions.

Background: No particular background required.

About the speaker: Ethan Berkove received his Ph.D. from U. Wisconsin, Madison and is a Professor of Mathematics at Lafayette College. His primary research interests are in topology, algebra, and the interactions between these fields. He is also interested in mathematical recreations and connections between mathematics and origami.

SNACKS IN MH331B AT 2:30 PM
TALK STARTS AT 3 PM

For more information, see our full schedule at:

`http://www.math.sjsu.edu/~hsu/colloq/`