



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



**Jay Cummings**

**Sam Houston State Univ**

*The Math of Juggling*

MAY 08, 2019, MH320

**Abstract:** The mathematics of juggling began with the goal to characterize, and then study, physical juggling patterns. In the past few decades this study has expanded, inspiring questions from several areas of mathematics. One of the many ways to represent a juggling pattern is through so-called juggling cards. These are templates which describe the spatial ordering of a set of balls at each point in a juggling pattern. In this talk we describe a number of new combinatorial and probabilistic results in the study of these objects, and state some related unsolved problems.

*Background:* No background necessary.

**About the speaker:** Jay Cummings earned his PhD from UC San Diego in 2016 where nearly half of his dissertation was on the math of juggling. He is now an assistant professor at Sacramento State University and recently published the book *Real Analysis: A Long-Form Mathematics Textbook*.

SNACKS IN MH331B AT 2:30 PM  
TALK STARTS AT 3:00 PM

For more information, see our full schedule at:

<http://www.timhsu.net/colloq/>