



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



# Francis Su

Harvey Mudd College (visiting MSRI)

*Combinatorial Fixed Point Theorems*

NOVEMBER 08, 2017, MH320

**Abstract:** Sperner's Lemma is a combinatorial analog of a famous theorem in topology: the Brouwer fixed point theorem. In this talk, I will trace recent connections, generalizations, and applications of Sperner's lemma to the Nash equilibrium theorem, problem of fair division, and the game of Hex. Some of this work includes research with undergraduates.

*Background:* Basic counting, a little analysis, and a love for math.

**About the speaker:** Francis Su is Benediktsson-Karwa Professor of Mathematics at Harvey Mudd College and Past-President, Mathematical Association of America. His research is in topological combinatorics and applications to the social sciences. You might also like his math news app, MathFeed, available for iPhone.

SNACKS IN MH331B AT 2:30 PM

TALK STARTS AT 3:00 PM

For more information, see our full schedule at:

<http://www.math.sjsu.edu/~hsu/colloq/>