

## **Department of Mathematics and Statistics**

**Thursday, April 28<sup>th</sup>, 2016** 12:45 – 2:00 pm, Adel Mathematics Bldg., Room 164

Dr. Francis Su Harvey Mudd College

Honors week Advanced Talk

## Combinatorial Fixed Point Theorems

Abstract: The Brouwer fixed point theorem and the Borsuk-Ulam theorem are beautiful and well-known theorems of topology that admit combinatorial analogues: Sperner's lemma and Tucker's lemma. In this talk, I will trace recent connections and generalizations of these combinatorial theorems, including applications to the social sciences. Some of this work includes research with undergraduates.