Math and Stat Colloquium
Wednesday, Nov. 9
3:30pm BUS 318

Refreshments will be served in the Lund Hall Foyer at 3 p.m.

Speaker:
Francis Edward Su
Professor of Mathematics, Harvey Mudd College

"Voting in Agreeable Societies"

Abstract: When do majorities exist? How does the geometry of the political spectrum influence the outcome? What does mathematics have to say about how people behave? When mathematical objects have a social interpretation, the associated theorems have social applications. We give examples of situations where sets model preferences, and prove extensions of classical theorems on convex sets such as Helly's theorem and Turan's theorem that can be used in the analysis of voting in "agreeable" societies. This talk also features research with undergraduates.

Biography: Francis Edward Su is a Professor of Mathematics at Harvey Mudd College, and earned his Ph.D. from Harvard University. His research is in geometric combinatorics and applications to the social sciences, and he has co-authored over a dozen papers with undergraduates. He also has a passion for teaching and popularizing mathematics. From the Mathematical Association of America (MAA), he received the 2001 Merten M. Hasse Prize for expository writing, the 2004 Henry L. Alder Award for distinguished teaching, and was the 2006 James R.C. Leitzel Lecturer. He currently serves as First Vice-President of the MAA. In his spare time he enjoys working on his "Math Fun Facts" website, which receives over a million hits each year, and most recently an iPhone app by the same name.