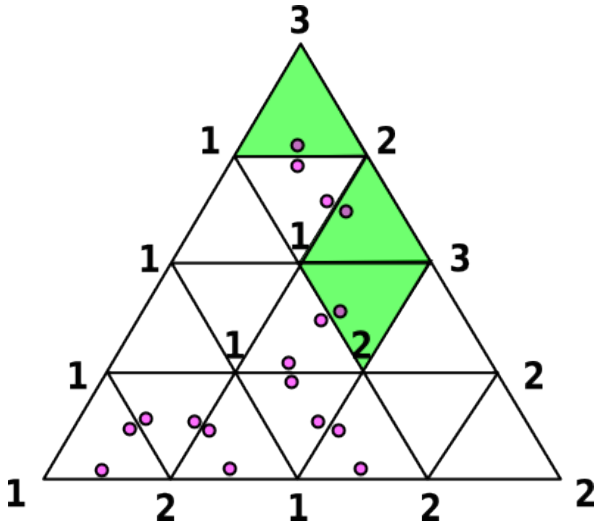
Department of Mathematics

Spring 2017 Colloquium Series



Combinatorial Fixed Point Theorems

Francis Su,
Harvey Mudd College

Thursday, February 2, 2017

Behavioral and Social Sciences Building Room 204, 4 pm

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.

Francis Edward Su is the Benediktsson-Karwa Professor of Mathematics at Harvey Mudd College. He received his B.S. in Mathematics from the University of Texas at Austin and his Ph.D. from Harvard University. He is currently President of the Mathematical Association of America. His research is in geometric combinatorics and applications to the social sciences, and he has co-authored numerous papers with undergraduates. He has received multiple NSF research grants for his work. He also has a passion for teaching and popularizing mathematics. From the Mathematical Association of America, he received the 2001 Hasse Prize for expository writing, and the 2004 Alder Award and the 2013 Haimo Award for distinguished teaching. He authors the popular Math Fun Facts website and is creator of "MathFeed", the math news app. His hobbies include songwriting, gardening, photography, and theology. Just like mathematics, these are modes of creative expression that divinely blend structure and freedom, truth and beauty, reflection and action.

For a complete abstract, go to http://www.humboldt.edu/math/news-and-events/math-colloquium

We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS building at 3:30 pm on Thursday.