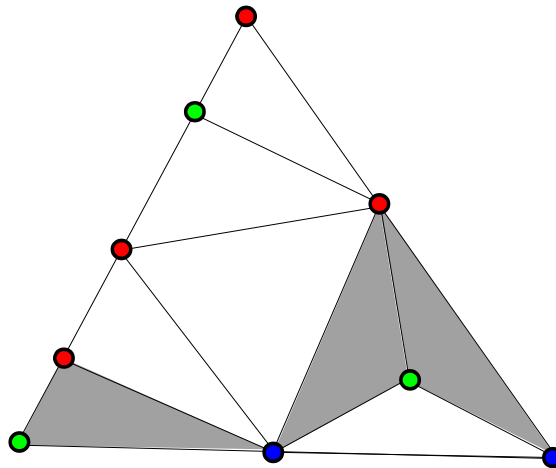# SUMO Symposium

Wednesday, January 19
5:45-6:30 PM
380-380W

Equiareal Triangulation

Moor Xu

ABSTRACT:

The main theorem of the talk will be that any dissection of a square into triangles of equal areas requires an even number of such triangles; a square cannot be divided into an odd number of triangles with equal areas. This theorem was first proved by Paul Monsky in 1970, and the proof requires elements from two seemingly disjoint areas of mathematics: number theory and combinatorial topology. Along the way, we will see p-adic numbers and a combinatorial proof of Brouwer's fixed point theorem.

sumo.stanford.edu/symposium