Special Colloquium

Polyhedra that know calculus

Dr. Federico Ardila
San Francisco State University

Federico Ardila is a Colombian mathematician and DJ who researches combinatorics and specializes in matroid theory. Ardila graduated with a B.Sc. in 1998 and a Ph.D in 2003 in Mathematics from MIT. Ardila is currently a professor at SFSU and additionally holds an adjunct position at the University of Los Andes in Colombia. In addition to mathematics, Ardila enjoys making music and is a co-founder of the Oakland DJ collective La Pelanga.

Abstract: I will introduce you to two beautiful polyhedra that are hiding underneath the multiplication table. These polyhedra know how to perform some interesting calculus computations. The reasons for this surprising fact lie at the intersection of combinatorics, algebra, and geometry. Most of the talk will be accessible to anyone who knows the multiplication table.

Keywords: Multiplication table, polyhedra, calculus, inverses, combinatorics.

Social Justice, Music and Math: After the 50-minute long talk on polyhedra, the event will continue with an informal conversation with the speaker about social justice, music, and mathematics.

Friday, May 6, 2:00 – 3:50 pm

For more info visit the department website for the colloquium