

The Math Colloquium Department of Mathematics San José State University



## Serkan Hosten SFSU

## Gröbner Bases of Toric Varieties

March 21, 2012, MH320

**Abstract:** This talk is about points with integer coordinates in polyhedral cones. Looking at them through algebra takes us to Gröbner bases of toric varieties. In particular, I will talk about the case when these points "fill up" the polyhedral cone in question: the normal case. I will mention fascinating open problems about these fundamental objects.

*Background:* One semester of linear algebra and some familiarity with polynomials.

**About the speaker:** Serkan Hosten received his Ph.D. from Cornell University and is Professor of Mathematics at San Francisco State University. He works in computational algebraic geometry with applications in optimization and statistics.

SNACKS IN MH331B AT 2:30 PM TALK STARTS AT 3 PM

For more information, see our full schedule at:

http://www.math.sjsu.edu/~hsu/colloq/