



The Math Colloquium
Department of Mathematics
San José State University



Rick Scott
Santa Clara University

Counting elements in reflection groups

NOVEMBER 18, 2009, MH320

Abstract: We will describe some tilings of the Euclidean and hyperbolic plane that are obtained by repeatedly reflecting a polygonal tile across its edges. The problem of counting the number of tiles is an interesting challenge (especially since there are infinitely many of them) but becomes manageable when one uses generating functions. In this talk, we will compute some of these generating functions for reflection tilings and describe a reciprocity formula that they satisfy.

Background: It will be helpful, but not necessary, to have some experience with groups; one semester of abstract algebra should be more than enough.

About the speaker: Richard Scott is an Associate Professor of Mathematics at Santa Clara University. He earned his Ph.D. at M.I.T. and subsequently held post-doctoral positions at the Institute for Advanced Study and The Ohio State University. His research interests include geometric group theory and the topology of algebraic varieties and configuration spaces.

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/>