



The Math/Stats Colloquium  
Department of Mathematics and Statistics  
San José State University



# Angela Hicks

## $n$ Capricious Wives and the Diagonal Harmonics

MARCH 12, 2014, MH320

**Abstract:** In 1966, Konheim and Weiss told the mathematical story of  $n$  dutiful husbands driving down a one way street and parking in the first available space upon receiving the command from their  $n$  (independently) capricious wives. We will discuss the now famous combinatorial object that results from the story — the *parking function* — and a few of the reasons for its study. In particular, we'll discuss a space of multivariate polynomials called the *diagonal harmonics* and their conjectured connection to the parking functions. We'll discuss open problems in the area, and time permitting, a connection to the Catalan numbers.

*Background:* Basic familiarity with partial derivatives and linear algebra.

**About the speaker:** Angela Hicks received her Ph.D. from the University of California-San Diego and is a National Science Foundation Fellow at Stanford University. Her current mathematical interests lie primarily in algebraic combinatorics, especially the shuffle conjecture and other combinatorics inspired by Macdonald polynomials.

SNACKS IN MH331B AT 2:30 PM

TALKS START AT 3 PM

For more information, see our full schedule at:

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