



The Math Colloquium  
Department of Mathematics  
San José State University



# Marian Farah

## UC Santa Cruz

*Statistics, Satellites, and Other Adventures*

MARCH 9, 2011, MH320

**Abstract:** Bayesian statistics, named after Thomas Bayes, is a method of statistical inference that uses aspects of the scientific method to express uncertainty about a quantity of interest. In this talk, two projects that use Bayesian statistical modeling are discussed. The first project deals with a simulation that models the interaction of sunlight with vegetation on the surface of the Earth as observed by a satellite sensor. The second project is concerned with the vulnerability of spaceborne microchips to soft errors due to high energy particles (from solar wind or cosmic rays) striking a sensitive node in the device.

*Background:* One course in statistics or probability. In particular, students should have seen probability distributions (e.g., normal distributions).

**About the speaker:** Marian Farah is a Ph.D. candidate in the Statistics group at the Applied Mathematics and Statistics Department, at UC Santa Cruz. Prior to starting her Ph.D. studies at UCSC, she completed a BS in Applied Mathematics at SJSU and a MS in Statistics at CSU East Bay.

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/>