Stanford University
Departments of Mathematics and Statistics

PROBABILITY SEMINAR

4:15pm, Monday, May 7, 2012
Sequoia Hall Room 200
Cookies served at 3:45pm, 1st floor Lounge.

Speaker: Benjamin Young, MSRI/KTH

Title: Experimental matrix inversion and lattice path ensembles

Abstract:
I will explain how we computed the correlation kernel for a certain ensemble of nonintersecting lattice paths. The hardest and most interesting step in this was the explicit computation of the inverse of a certain matrix (a task which is harder than it sounds, when the matrix has many parameters). To do this, we first guessed the answer with the aid of a fast computer, and then proved our guess was correct with a curious application of Lagrange interpolation.

This is joint work with Eric Nordenstam.