

COLLOQUIUM

Department of Statistics and Probability
Michigan State University

Wei Biao Wu
University of Chicago

Random Matrix Theory and Covariance Matrix Estimation

Tuesday, November 22, 2011
A405 Wells Hall
10:20 a.m. - 11:10 a.m.
Refreshments: 10:00 a.m.

Abstract

I will give an introduction of modern random matrix theory, in particular the asymptotic theory for eigenvalues of sample covariance matrices. Then I will discuss the high dimensional covariance matrix estimation problem. Using the framework of nonlinear processes described in Wiener (1958), I will talk about the convergence of regularized covariance matrix estimates. These results can be applied to the traditional Wiener-Kolmogorov prediction theory.

To request an interpreter or other accommodations for people with disabilities, please call the Department of Statistics and Probability at 517-355-9589.