Minimax Estimation of Large Covariance Matrices

TUESDAY, May 22, 2012, at 5:30 PM
110 Eckhart Hall, 5734 S. University Avenue

ABSTRACT

Driven by a wide range of applications in high-dimensional data analysis, there has been significant recent interest in the estimation of large covariance matrices. In this talk, optimal estimation of a covariance matrix over several commonly used parameter spaces is considered under the matrix operator norm. Both minimax lower and upper bounds are derived.