SCMS Statistics Seminars

Title: Analysis of Some Nonparametric Estimates of Large Covariance Matrices

Speaker: Professor Cun-Hui Zhang

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Time: November 15, 2013 (Friday) 10:00 am - 11:00 am

Location: Room 2201, Guanghua East Tower (光华东主楼)

Abstract: We consider the estimation of large covariance matrices by nonparametric methods such as Kendall's tau and Spearmen's correlation. We prove that in a semiparametric model, the rate of convergence of such nonparametric methods in the spectrum norm is comparable to that of the sample covariance matrix based on Gaussian data. Consequences of our results on PCA and some other high-dimensional estimation problems are discussed.

This seminar series is co-organized by the Department of Statistics and the Institute of Biostatistics, Fudan University.