Title: Difference between Large Statistical Model and Medium Statistical Model

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(School of Mathematics and Statistics, Northeast Normal University) Abstract:

In this talk, we will show that the large statistical model will have a very different performance compared with the medium model. For example, when the sample size is fixed and the dimension of data increases (convergence regime), the power function of the log-likelihood ratio test for the covariance matrix will tend to one. Moreover, under the convergence regime, the estimated number of factors in the factor model will be more accurate. Moreover, we will give some other examples to show the difference between large statistical model and medium statistical model.