



THE UNIVERSITY OF  
**CHICAGO**

Department of Statistics

**SECOND YEAR PHD MINI SEMINARS**

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**ZHE LIU**

Department of Statistics  
The University of Chicago

**Clustering with Mixtures of Penalized Gaussian  
Graphical Models**

**THURSDAY, May 9, 2013, at 4:00 PM**

110 Eckhart Hall, 5734 S. University Avenue

**ABSTRACT**

Clustering is one of the most useful tools for high-dimensional analysis. We investigate a model-based clustering method with components defined by penalized Gaussian graphical models. This permits simultaneous recovery of cluster assignments and estimation of cluster-specific graphical model structure. An E-M algorithm is derived to estimate the parameters and perform the clustering.

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