Estimation and Structures in Identification of Latent Group Panel Data with Interactive Fixed Effects

Ali Mehrabani
School of Analytics, Finance and Economics, SIUC

10-5-23
Neckers 156
Time: 3:00pm
Reception immediately following in the math library.

Abstract: This paper provides a framework for joint estimation and identification of latent group structures in panel data models with interactive fixed effects using a pairwise fusion penalized approach. The latent structure of the model allows individuals to be classified into different groups where the number of groups and the group membership are unknown. A penalized principal component (PPC) estimation procedure is introduced to detect the latent group structure. To implement the proposed approach, an alternating direction method of multipliers algorithm has been developed. The proposed method is further illustrated by simulation studies and an empirical application of economic growth which demonstrate the performance of the method.